

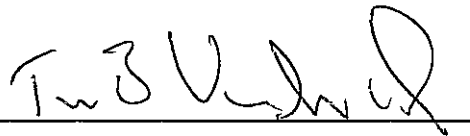
**Report of Results: MVA5394**

**Analysis of Settled Dust  
Atascadero State Hospital**

**Prepared for:**

**State of California  
Dept of General Services  
Seismic & Special Programs  
707 West 3rd St.  
West Sacramento, CA 95605**

**Respectfully Submitted by:**



**Tim B. Vander Wood, Ph.D.  
Executive Director**

**MVA Scientific Consultants  
3300 Breckinridge Boulevard  
Suite 400  
Duluth, GA 30096**

**30 August 2007**



**Report of Results: MVA5394****Analysis of Settled Dust - Atascadero State Hospital****Introduction**

On 1 August 2007, we received five settled dust samples from Clark Sief Clark, reportedly collected from Atascadero State Hospital, NTA Bldg. We were asked to determine the asbestos levels in the dust and possible sources for the asbestos. Upon receipt, the samples were assigned MVA Scientific Consultants laboratory identification numbers as follows:

| <u>Sample ID</u> | <u>Sample Description</u>  | <u>MVA Number</u> |
|------------------|--|-------------------|
| 32VA             | NTA Bldg. Hatch 32, return air plenum, surface                           | S0934             |
| 33VA             | NTA Bldg. North Hallway between 29 & 30,<br>return air plenum, surface   | S0935             |
| 34VA             | NTA Bldg. Main Hallway West next to Rm 38,<br>return air plenum, surface | S0936             |
| 35VA             | NTA Bldg. Hallway between 17 & 18,<br>return air plenum, surface         | S0937             |
| 36VA             | NTA Bldg. Hallway across from Rm 22,<br>return air plenum, surface       | S0938             |

All analyses were carried out in our laboratory during the period 1 August through 30 August 2007.

**Methods**

The samples were analyzed according to ASTM Method D5755-03 using either a Philips model EM420 or a Philips model CM120 transmission electron microscope (TEM), equipped with an Oxford INCA energy dispersive x-ray spectrometer (EDS). Additional analyses for dust constituents that might serve as source indicators were also conducted by TEM/EDS.

**Results and Discussion**

The results of analysis for these samples are presented in Table 1. The Appendix contains a summary of the analytical results, the laboratory count sheets, and images and EDS spectra of typical asbestos fibers found in these samples. Also contained in the appendix are images and spectra showing vermiculite associated with chrysotile fibers and other asbestiform amphibole minerals typical of those known as "Libby



amphibole" and observed as contaminants in vermiculite from the Libby, Montana vermiculite mine operated by W.R. Grace.

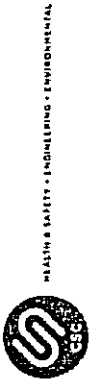
## Conclusions

Dust analyzed in this study contains elevated levels of chrysotile asbestos. Portions of the dust are consistent with derivation from a chrysotile/vermiculite bearing fireproofing. Asbestiform amphibole consistent with "Libby amphibole" was also found, indicating that the vermiculite in this dust originated at least in part at W.R. Grace's Libby vermiculite mine.

**Table 1. Asbestos Concentration in Settled Dust Samples**

| Sample ID | MVA Number | Asbestos Str/cm <sup>2</sup> |
|-----------|------------|------------------------------|
| 32VA      | S0934      | 4,605,333                    |
| 33VA      | S0935      | 2,651,556                    |
| 34VA      | S0936      | 3,488,889                    |
| 35VA      | S0937      | 27,911,111                   |
| 36VA      | S0938      | 13,955,556                   |





Chain of Custody-  
TEM Micro-Vacuum

Requested TAT (Circle One) Same Day One Day (24hr) Normal (48hr)  
Analysis Type (Circle One) Air Surface Bulk Water

| CSC Project #                    | Claim # | Sampling By   | # of Samples | Date(s) Taken                    | Page #                 | Total Pages   |                            |                     |
|----------------------------------|---------|---|--------------|----------------------------------|------------------------|---------------|----------------------------|---------------------|
| 1014265                          |         | FAS   | 5            | 7.25.07                          | 1                      | 1             |                            |                     |
| Project Name & Location:         |         |   |              |                                  |                        |               |                            |                     |
| Atascadero State Hospital        |         |   |              |                                  |                        |               |                            |                     |
| NTA Bldg.                        |         |   |              |                                  |                        |               |                            |                     |
| Sampling Area and/or Building #: |         |   |              |                                  |                        |               |                            |                     |
| Sample #                         | Date    | Sample Location   | Pump #       | Start Flow Rate<br>End Flow Rate | Start Time<br>End Time | Total<br>Time | Total<br>Volume/Area       | Type of<br>Analysis |
| 32VA                             |         | NTA Bldg. Hatch 32<br>Return Air Orleans Surface                          | TAP 46       | 10.91<br>10.91                   |                        | 2 min         | 100 cm <sup>2</sup>        |                     |
| 33VA                             |         | NTA Bldg. North Hallway<br>between 24 & 30 - Return Air Orleans Surface   |              |                                  |                        | 2 min         | 100 cm <sup>2</sup>        |                     |
| 34VA                             |         | NTA Bldg. Main Hallway West<br>near toke 235 - Return Air Orleans Surface |              |                                  |                        | 2 min         | 100 cm <sup>2</sup>        |                     |
| 35VA                             |         | NTA Bldg. Hallway<br>between 17 & 15 - Return Air Orleans Surface         |              |                                  |                        |               |                            |                     |
| 36VA                             |         | NTA Bldg. Hallway<br>across from room 22 - Return Air Orleans Surface     |              |                                  |                        |               |                            |                     |
| Relinquished By (Print & Sign)   |         |   |              |                                  |                        |               | Analysis By (Print & Sign) |                     |
| DALLY, FRANK STAFF 7.31.07       |         |   |              |                                  |                        |               | 8/1/07                     |                     |
| Relinquished By (Print & Sign)   |         |   |              |                                  |                        |               | Analysis Date & Time       |                     |
|                                  |         |   |              |                                  |                        |               |                            |                     |

## APPENDIX

**ASTM D5755 Results****MVA 5394**

By: W.Hill

**Client project number:**Str/cm = No Str. X CFA X Total Vol.

Grid Op. X GO Area X Vol Filt X Area Sampled

| <b>MVA #:</b> S0934 |      | <b>Client #:</b> 32.VA |         |             |            |            |
|---------------------|------|------------------------|---------|-------------|------------|------------|
| Str. #              | CFA  | #GO                    | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 33                  | 1256 | 10                     | 0.009   | 0.1         | 100        | 100        |

Anal. Sens = 139555.556 Str/CM2 LOD =3\* Anal. Sens = 418666.667  
 Total = 4605333.333 Str/CM2

| <b>MVA #:</b> S0935 |      | <b>Client #:</b> 33.VA |         |             |            |            |
|---------------------|------|------------------------|---------|-------------|------------|------------|
| Str. #              | CFA  | #GO                    | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 19                  | 1256 | 10                     | 0.009   | 0.1         | 100        | 100        |

Anal. Sens = 139555.556 Str/CM2 LOD =3\* Anal. Sens = 418666.667  
 Total = 2651555.556 Str/CM2

| <b>MVA #:</b> S0936 |      | <b>Client #:</b> 34.VA |         |             |            |            |
|---------------------|------|------------------------|---------|-------------|------------|------------|
| Str. #              | CFA  | #GO                    | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 25                  | 1256 | 10                     | 0.009   | 0.1         | 100        | 100        |

Anal. Sens = 139555.556 Str/CM2 LOD =3\* Anal. Sens = 418666.667  
 Total = 3488888.889 Str/CM2

| <b>MVA #:</b> S0937 |      | <b>Client #:</b> 35.VA |         |             |            |            |
|---------------------|------|------------------------|---------|-------------|------------|------------|
| Str. #              | CFA  | #GO                    | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 20                  | 1256 | 10                     | 0.009   | 0.01        | 100        | 100        |

Anal. Sens = 1395555.556 Str/CM2 LOD =3\* Anal. Sens = 4186666.667  
 Total = 27911111.111 Str/CM2

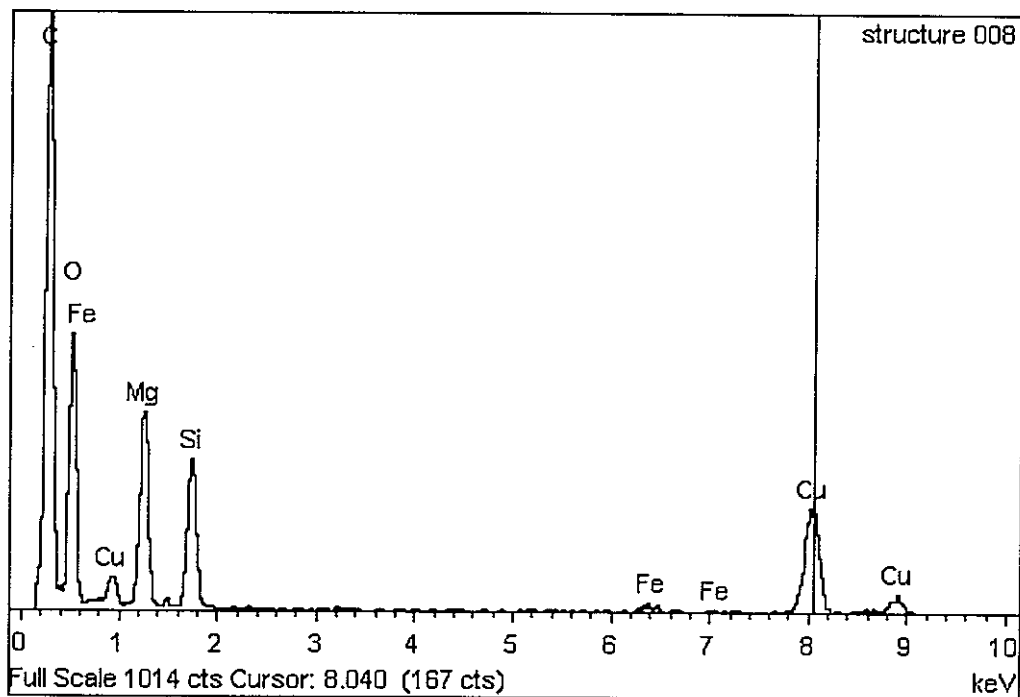
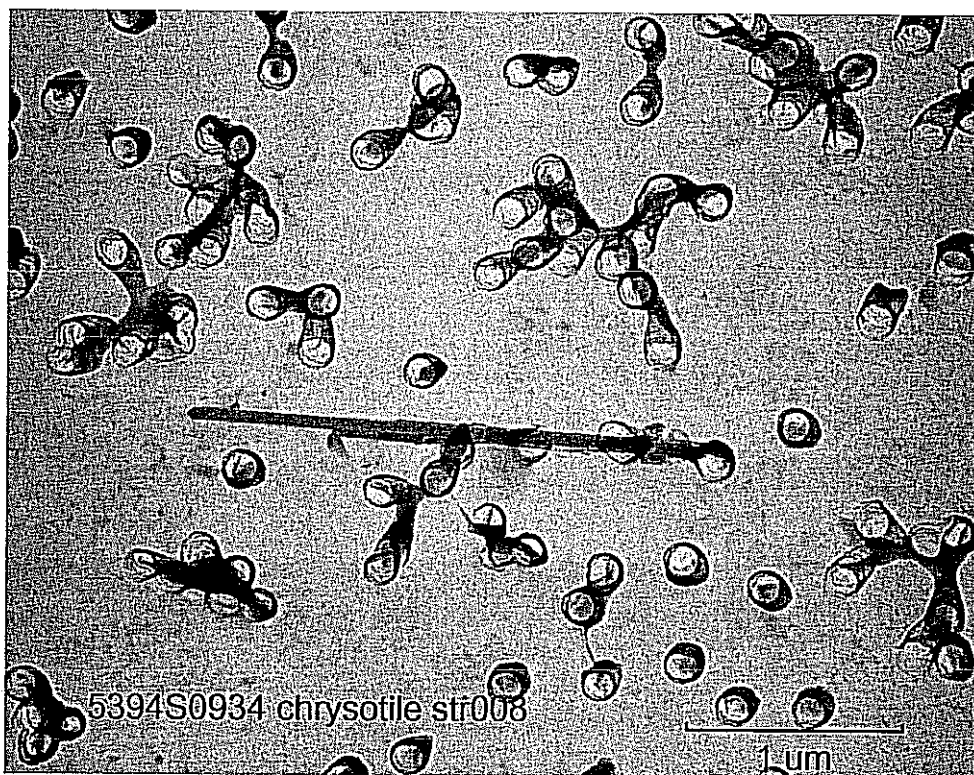
| <b>MVA #:</b> S0938 |      | <b>Client #:</b> 36.VA |         |             |            |            |
|---------------------|------|------------------------|---------|-------------|------------|------------|
| Str. #              | CFA  | #GO                    | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 10                  | 1256 | 10                     | 0.009   | 0.01        | 100        | 100        |

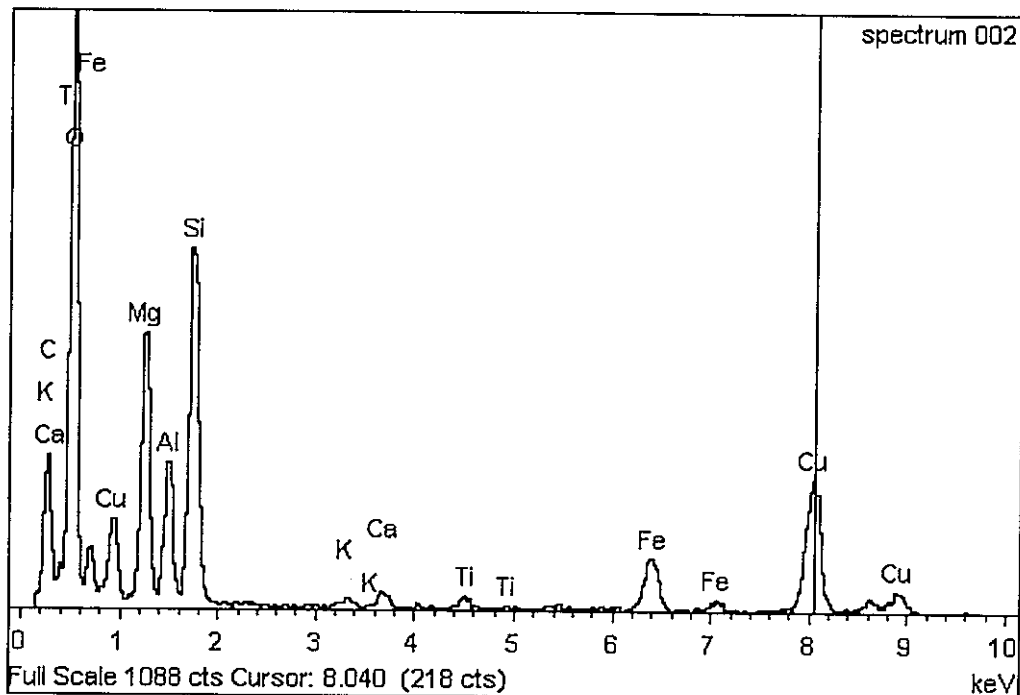
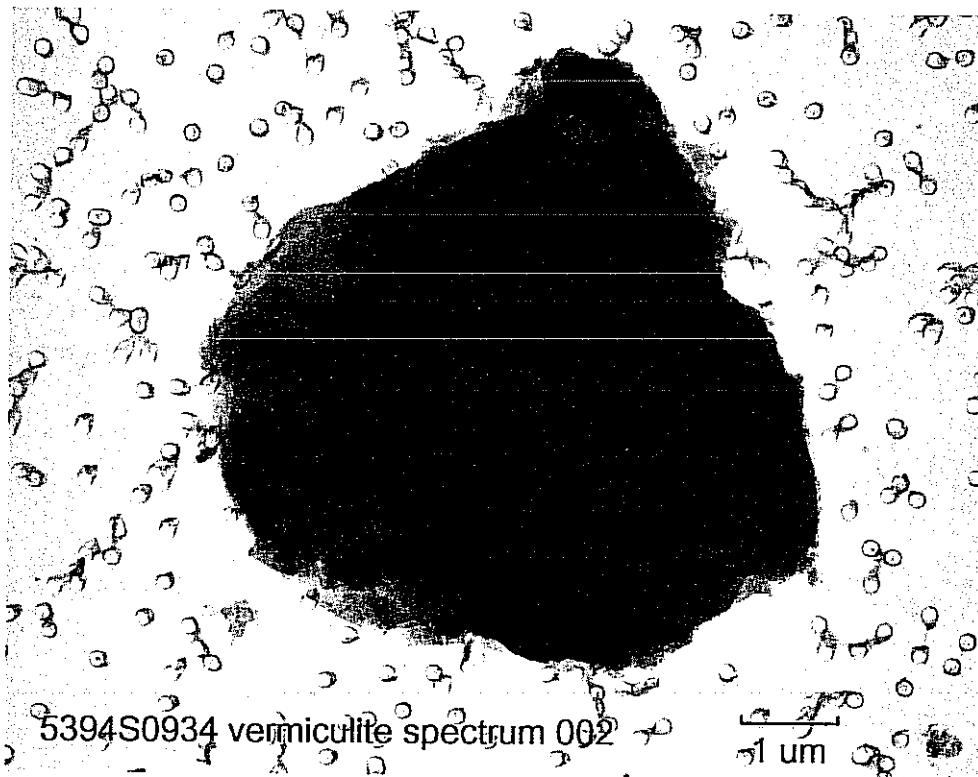
Anal. Sens = 1395555.556 Str/CM2 LOD =3\* Anal. Sens = 4186666.667  
 Total = 13955555.556 Str/CM2

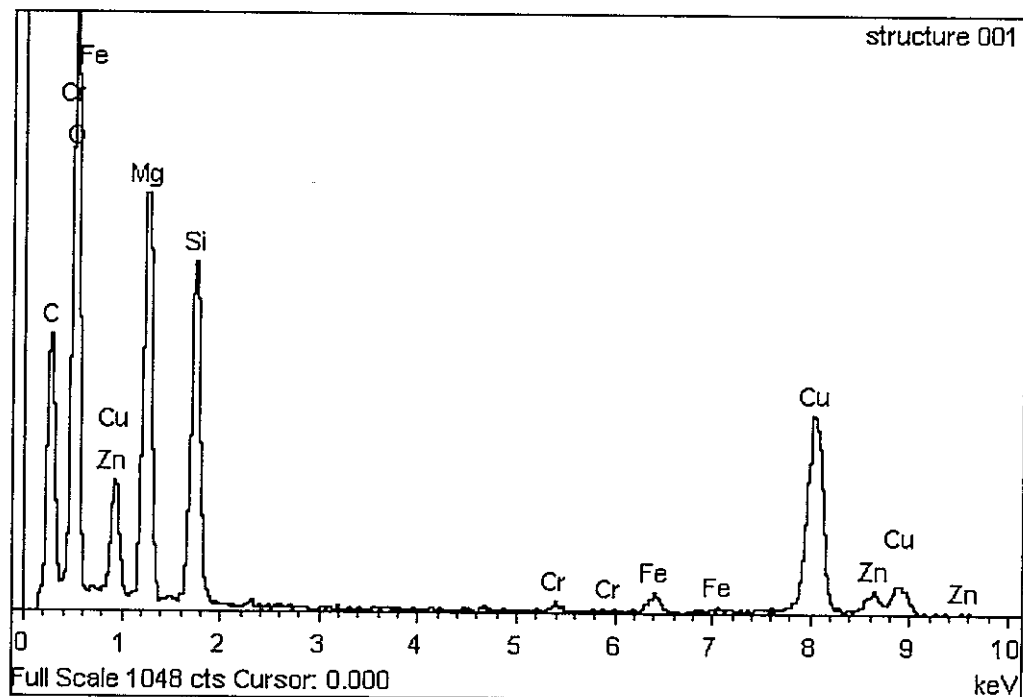
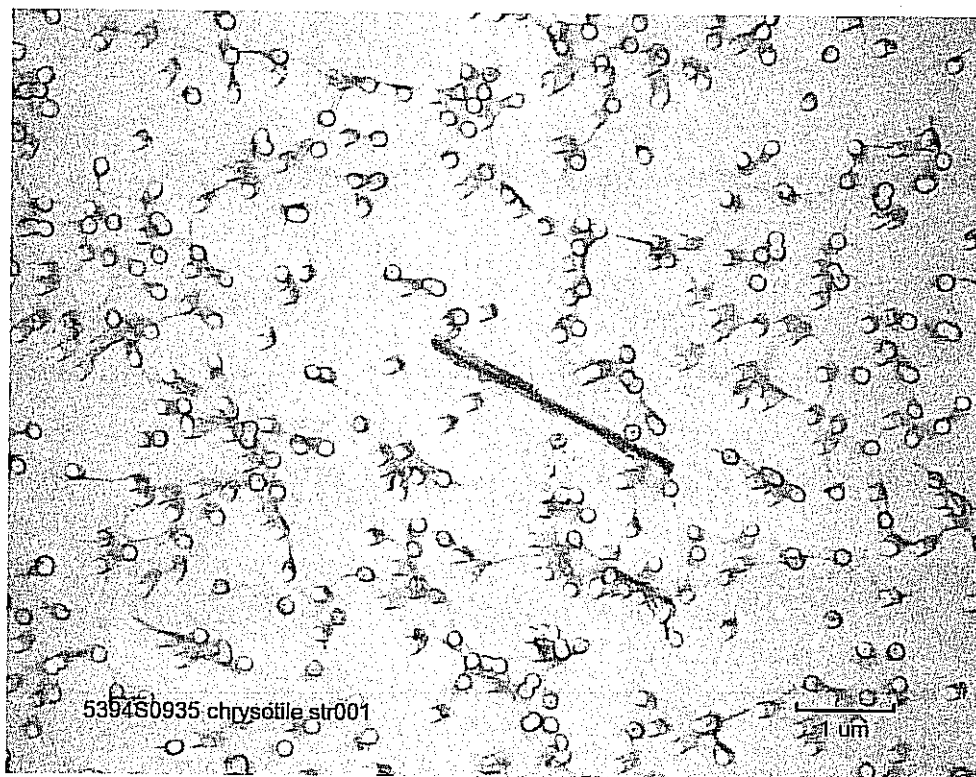
\* According to ASTM D6620

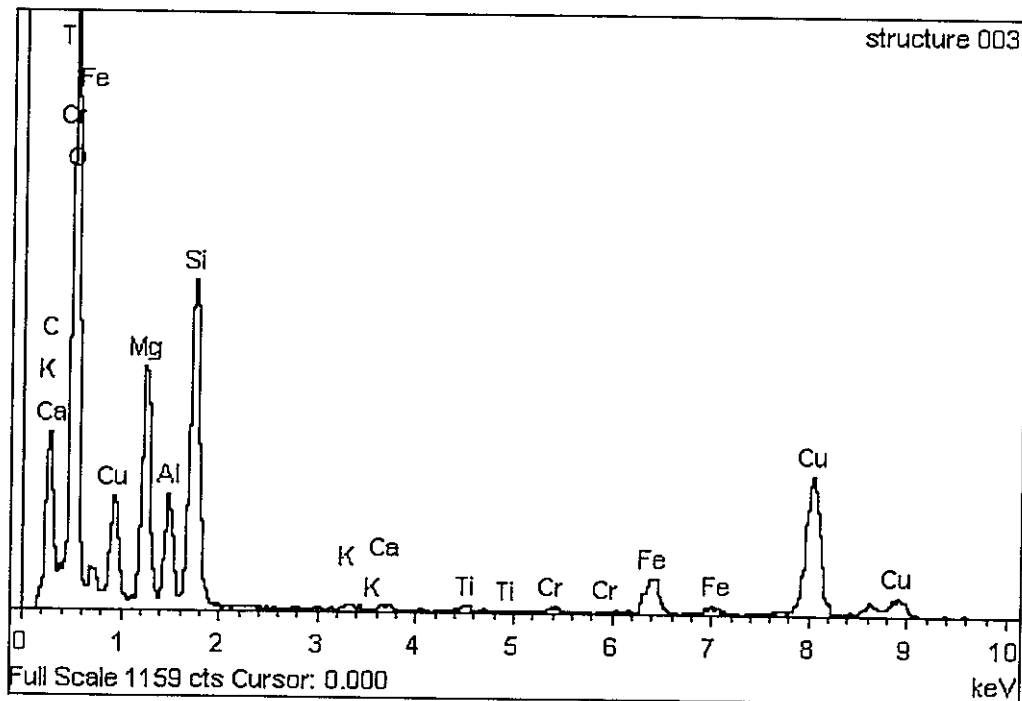
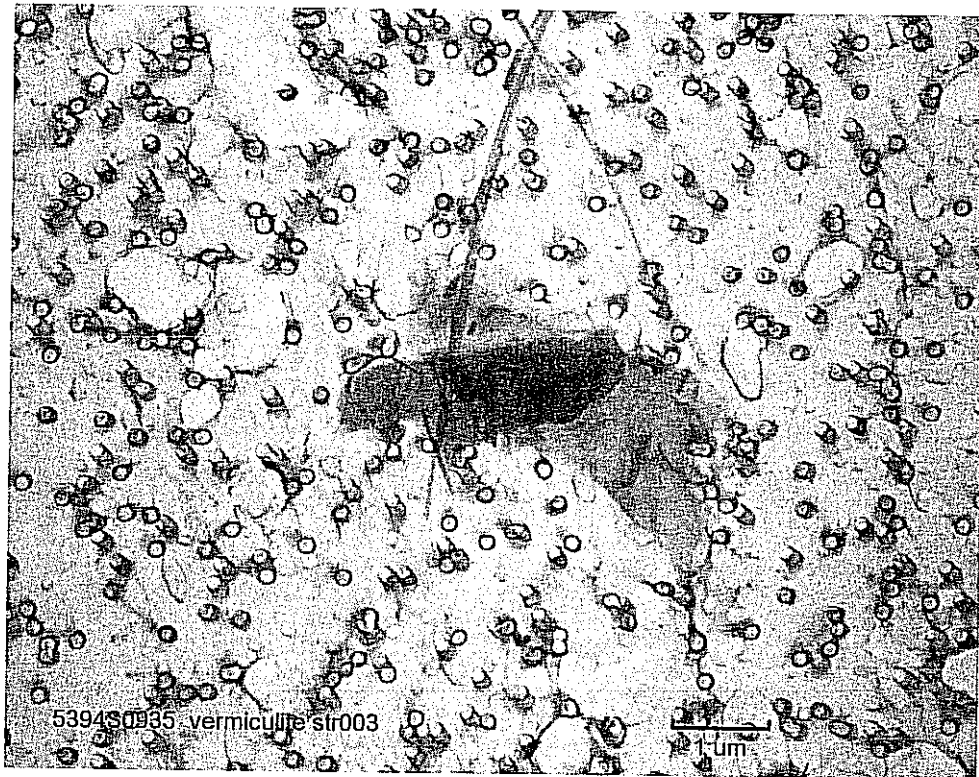
\*\* Assumed (Sample Area was not indicated on the original chain of custody)

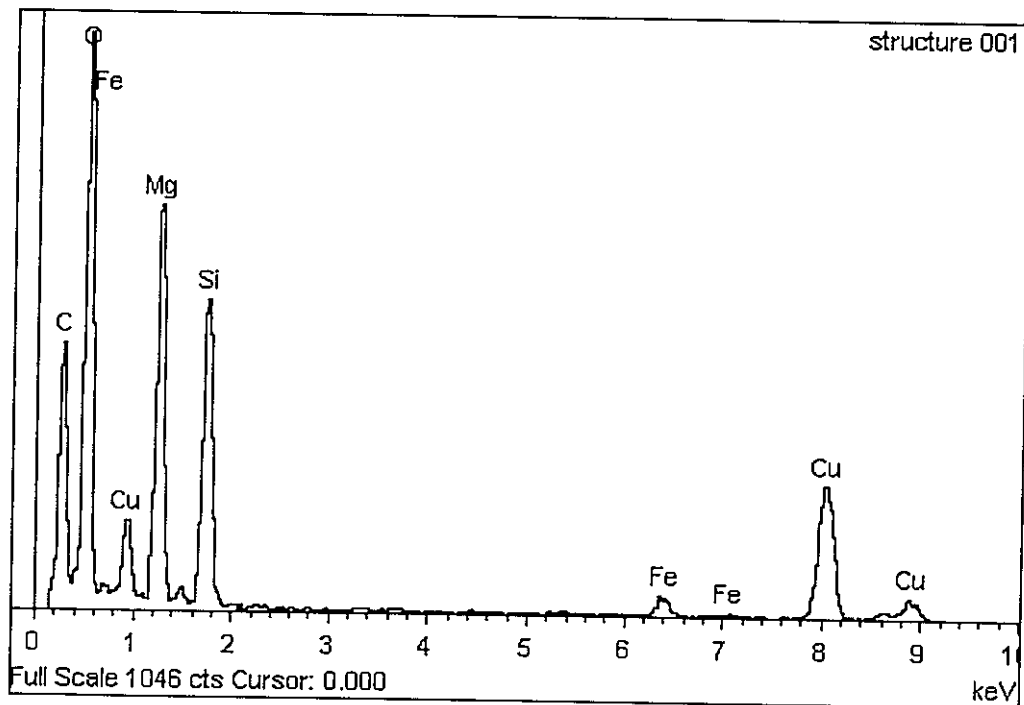
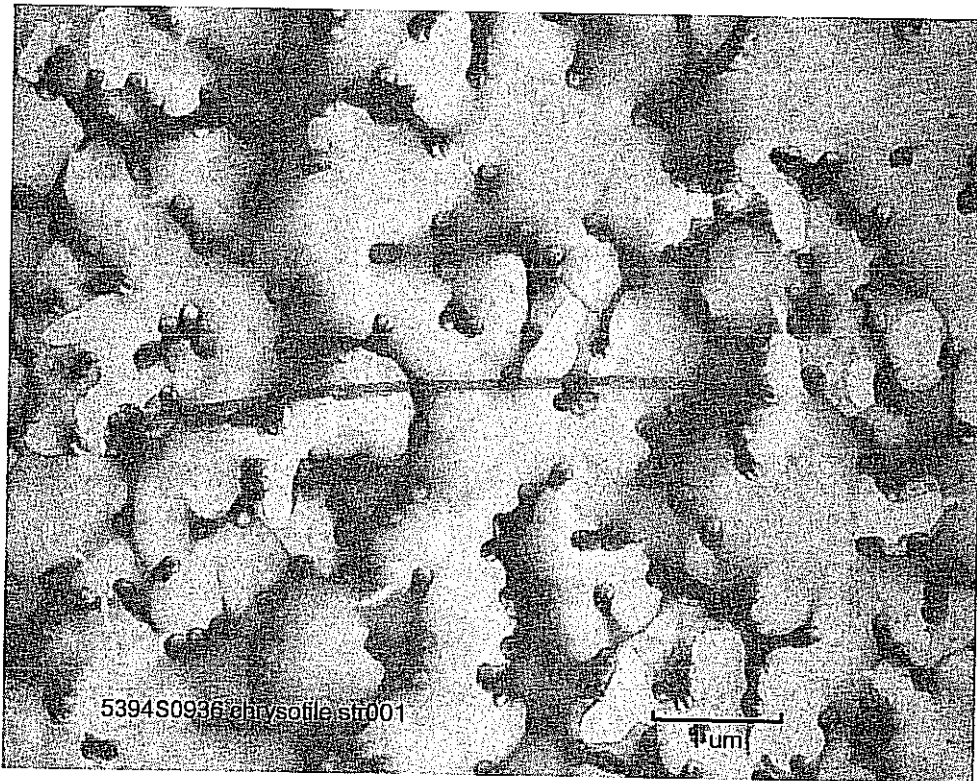


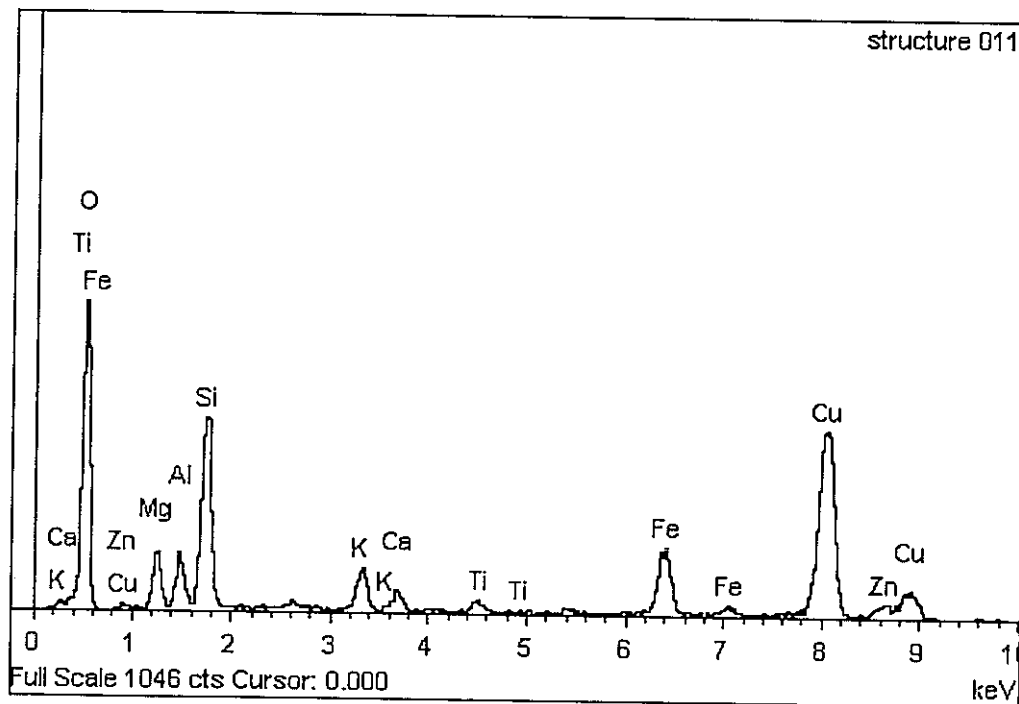
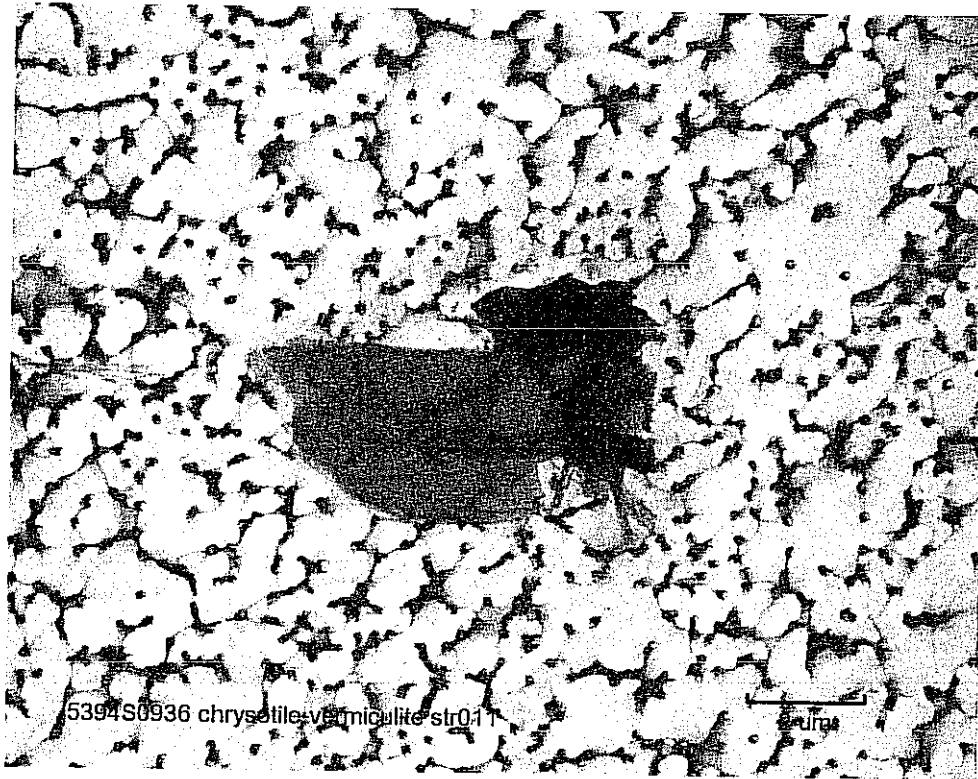


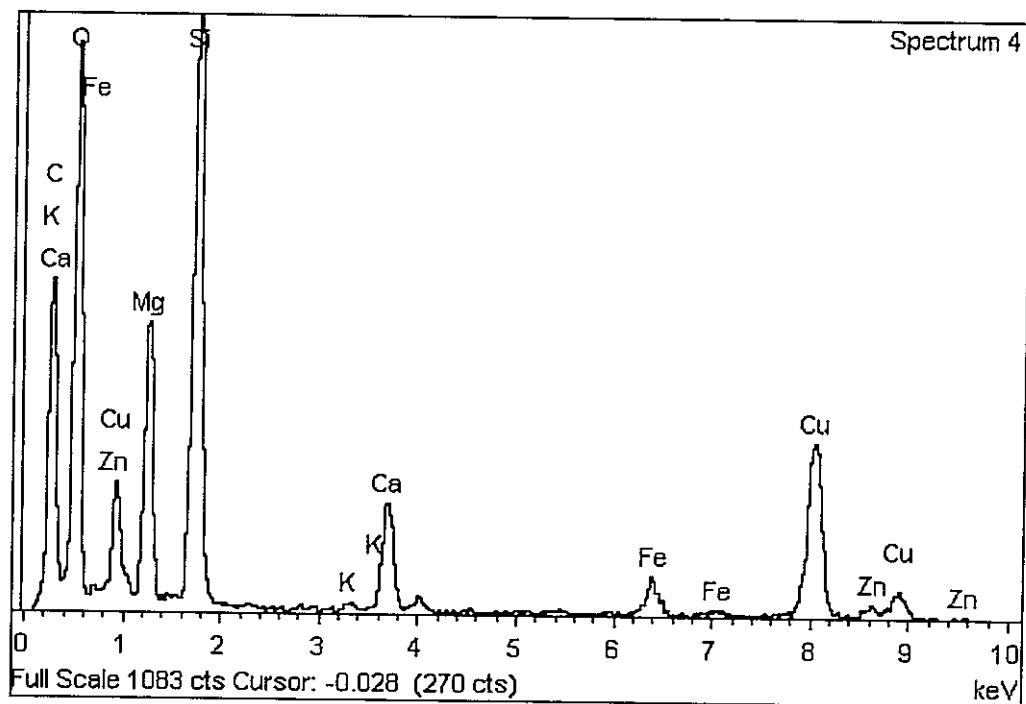
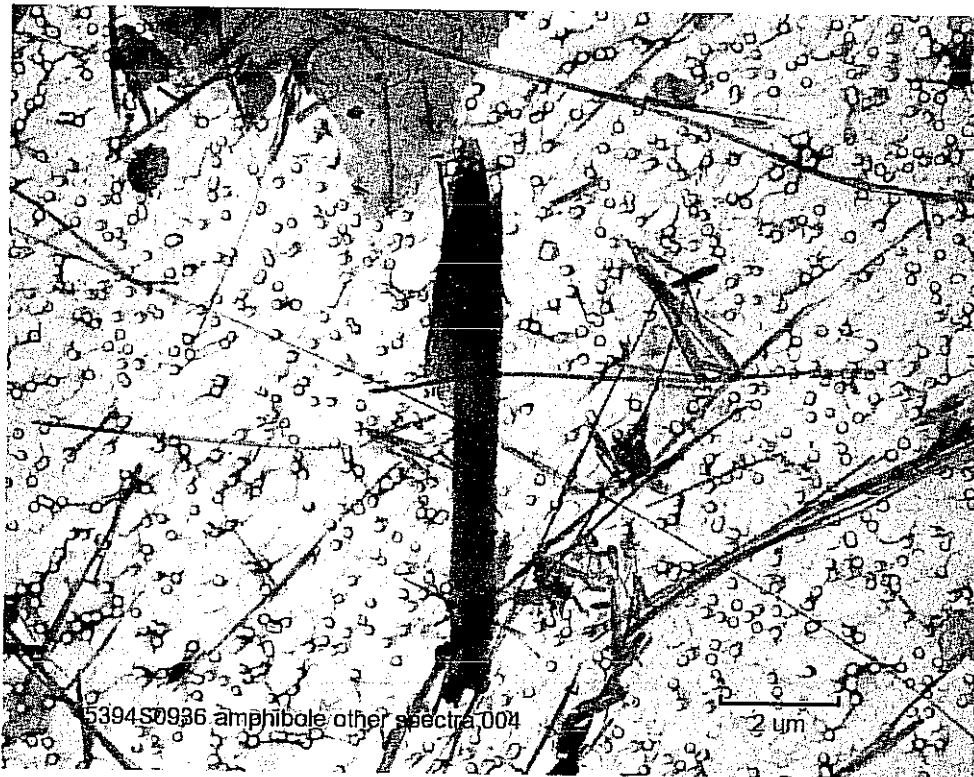


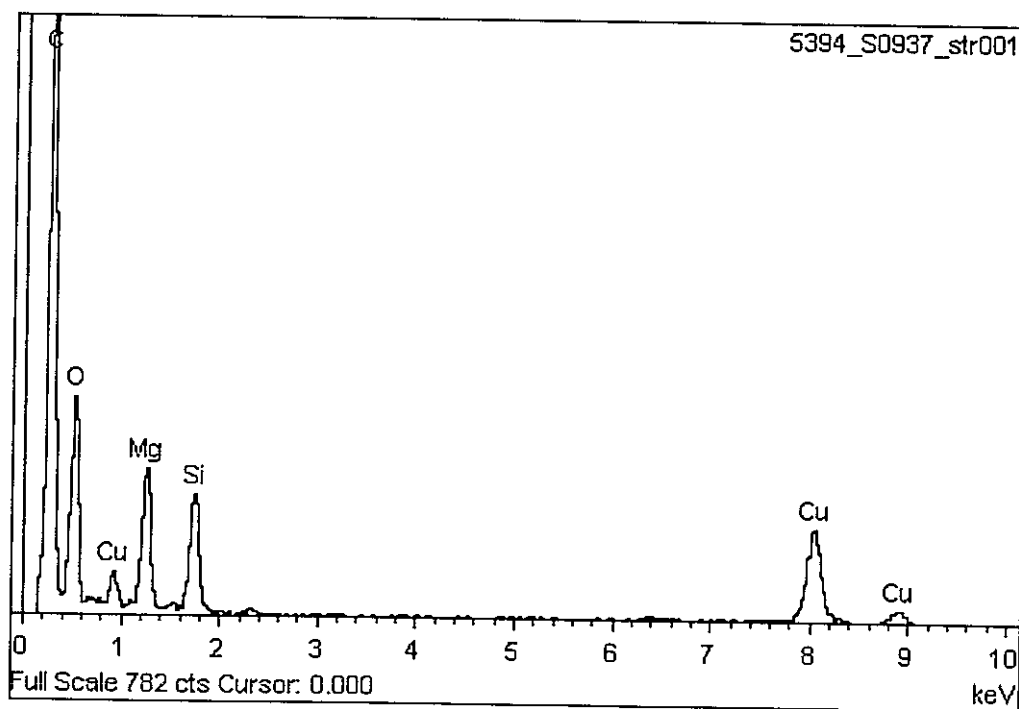
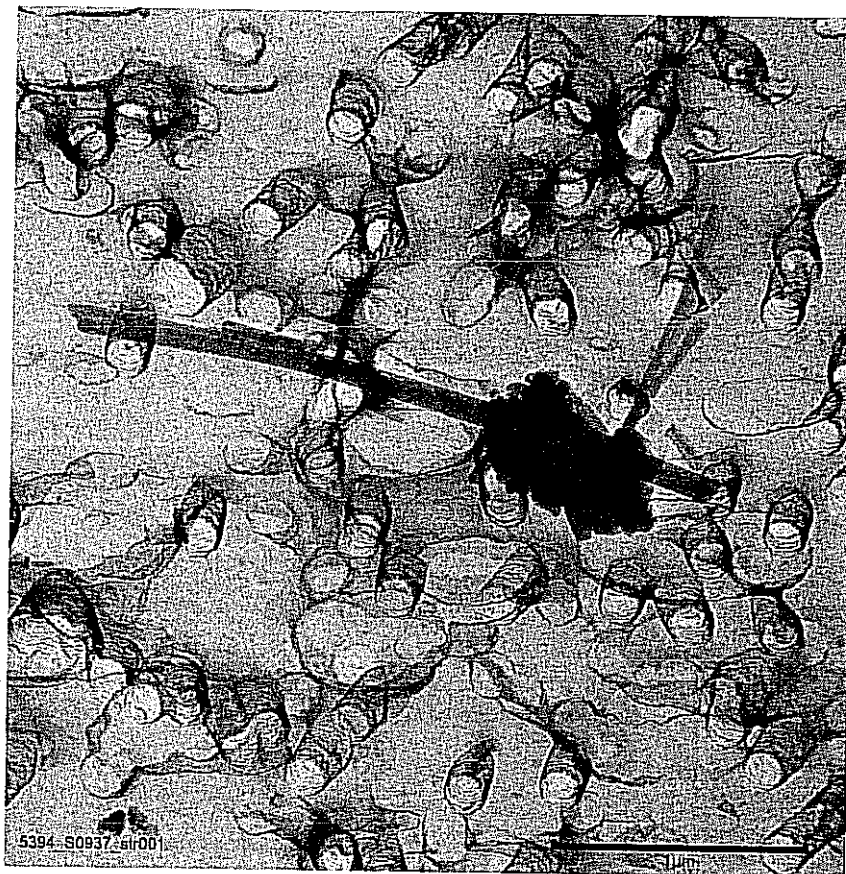


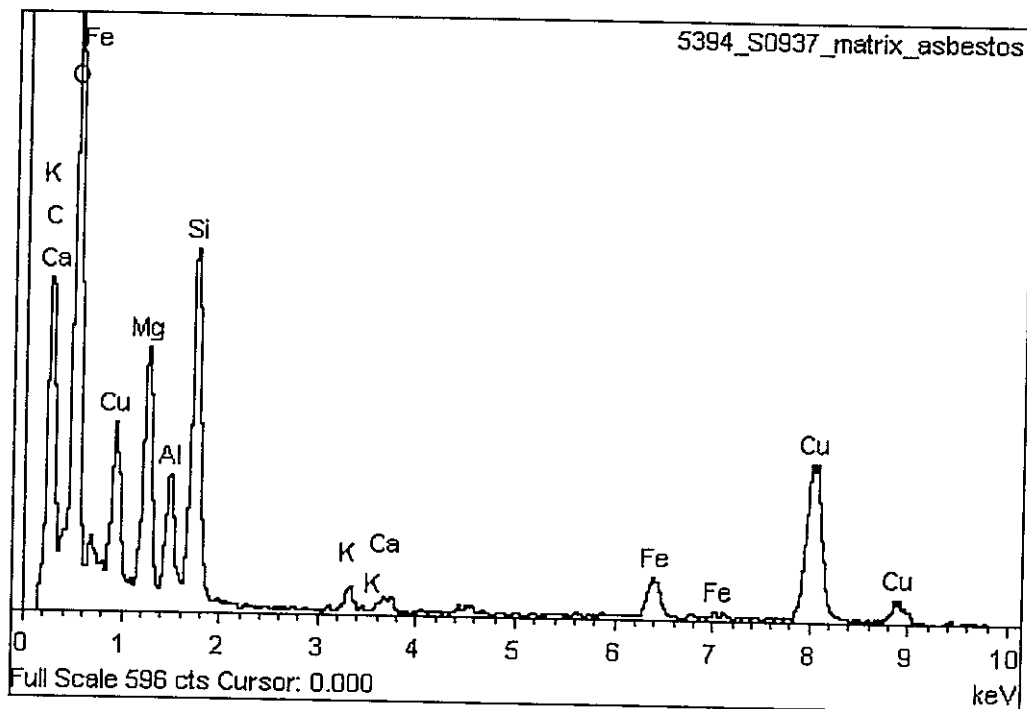


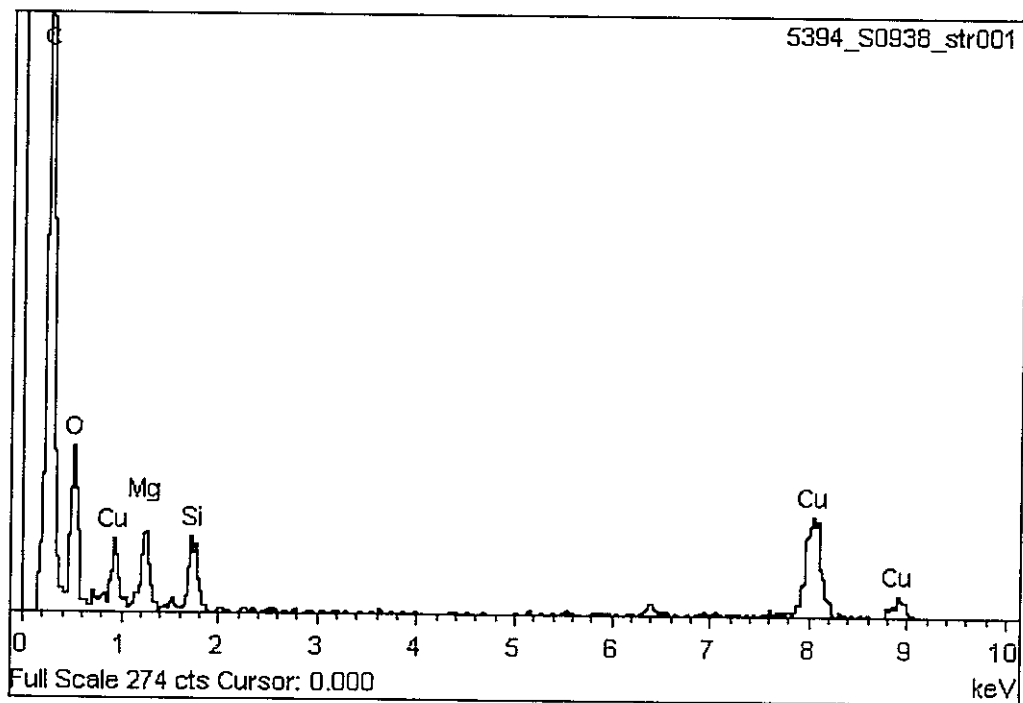
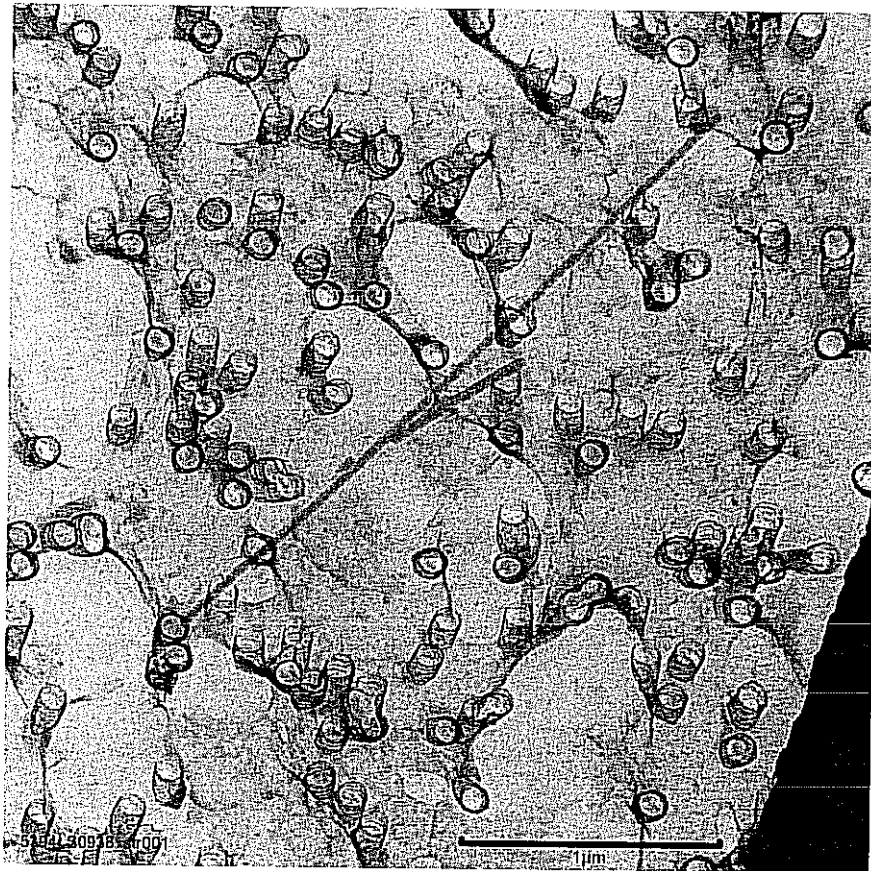


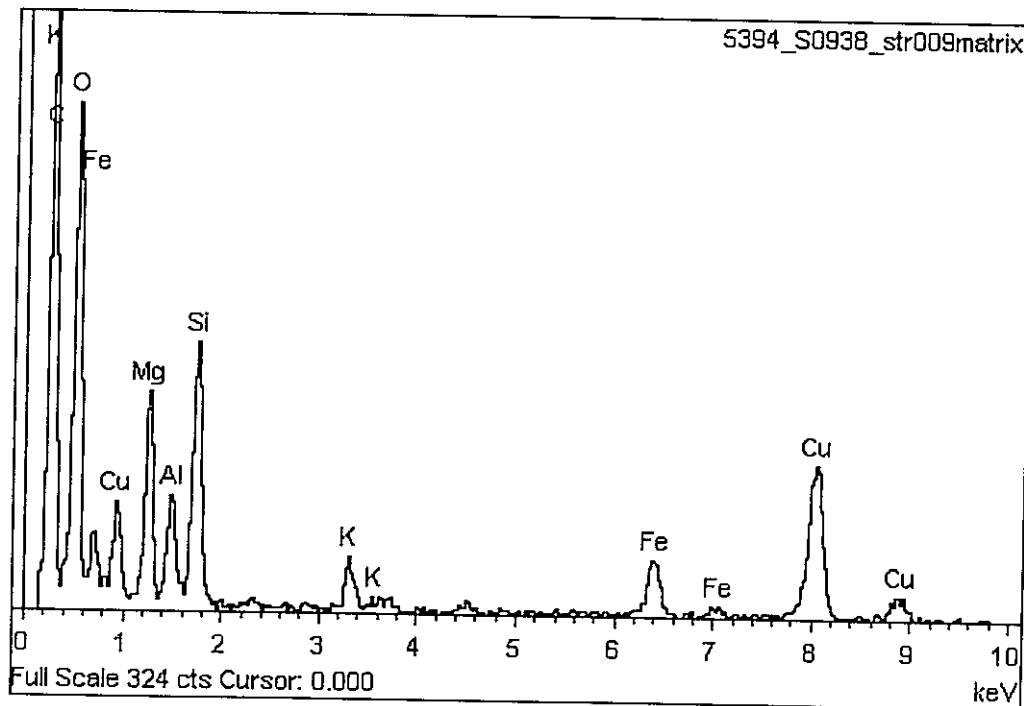
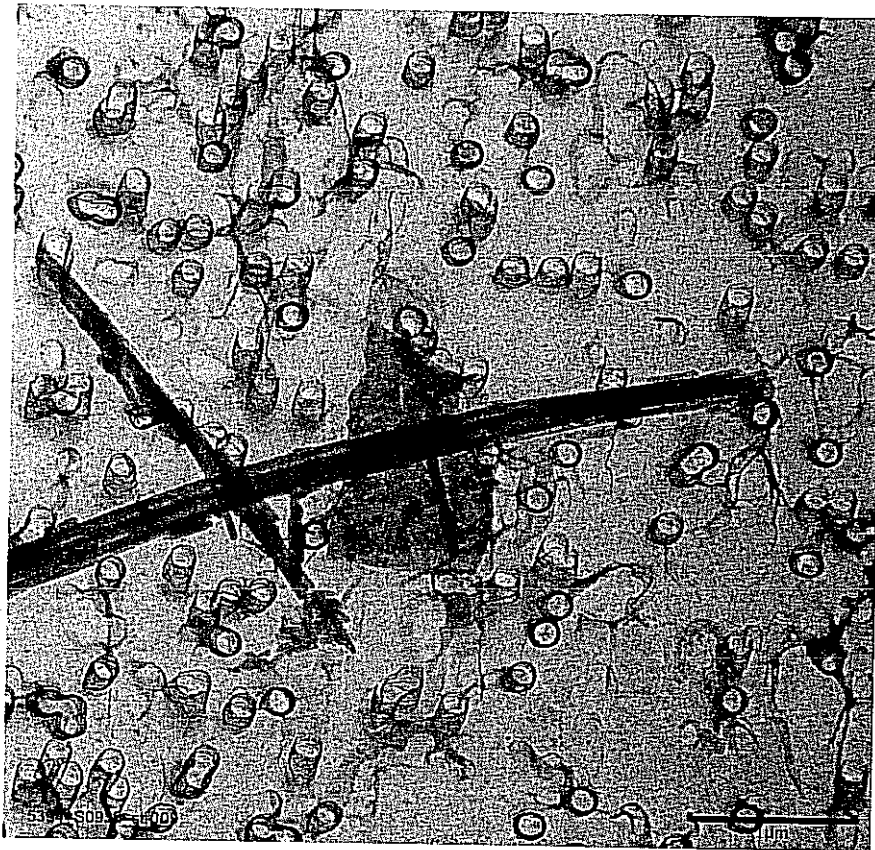












## Surface Dust Sample Analysis Sheet

MVA Project# 5394 Amt Collected(cm<sup>2</sup>): 100  
MVA Sample# S0934 Amt Prepped(cm<sup>2</sup>): 0.1  
Client I.D.: 32VA Filter Area (mm<sup>2</sup>): 1256  
Instrument: Philips 420 Filter Type: PC 0.2  
Magnification: 20,600 Openings Analyzed: 10  
Acc. Voltage: 100 Grid Opening (mm<sup>2</sup>): 0.009

Analyst: AH  
Date: 8/22/2007  
Page: 1 of 1  
Comments:  
ASTM Method: D6480  
or D5755 X

| Grid | Opening | Structure Number* | Structure Type | Length** (cm) | Width** (cm) | SAED | EDS | Comments | Length*** (μm) | Width*** (μm) |
|------|---------|-------------------|----------------|---------------|--------------|------|-----|----------|----------------|---------------|
| 1    | E6      | 1                 | F              | 6             | 0.2          | C    | C   |          | 2.9            | 0.10          |
|      |         | 2                 | F              | 13.0          | 0.2          | C    |     |          | 6.3            | 0.10          |
|      |         | 3                 | F              | 11.0          | 0.2          | C    |     |          | 5.3            | 0.10          |
|      |         | 4                 | F              | 2.5           | 0.1          | C    |     |          | 1.2            | 0.05          |
|      | C7      | 5                 | F              | 135.0         | 0.2          | C    |     |          | 65.5           | 0.10          |
|      |         | 6                 | F              | 72.0          | 0.2          | C    |     |          | 35.0           | 0.10          |
|      | B4      | 7                 | F              | 24.0          | 0.1          | C    |     |          | 11.7           | 0.05          |
|      |         | 8                 | F              | 5.5           | 0.2          | C    |     |          | 2.7            | 0.10          |
|      |         | 9                 | F              | 4.0           | 0.1          | C    |     |          | 1.9            | 0.05          |
|      |         | 10                | F              | 38.0          | 0.1          | C    |     |          | 18.4           | 0.05          |
|      |         | 11                | B              | 16.0          | 0.3          | C    |     |          | 7.8            | 0.15          |
|      | D2      | 12                | F              | 27.0          | 0.2          | C    |     |          | 13.1           | 0.10          |
|      |         | 13                | C              | 8.0           | 2            | C    |     |          | 3.9            | 0.97          |
|      |         | 14                | F              | 16.0          | 0.2          | C    |     |          | 7.8            | 0.10          |
|      |         | 15                | F              | 12.0          | 0.2          | C    |     |          | 5.8            | 0.10          |
|      |         | 16                | C              | 22.0          | 3            | C    |     |          | 10.7           | 1.46          |
|      |         | 17                | B              | 11.0          | 0.4          | C    |     |          | 5.3            | 0.19          |
|      | G4      | 18                | F              | 46.0          | 0.2          | C    |     |          | 22.3           | 0.10          |
|      |         | 19                | F              | 9.0           | 0.2          | C    |     |          | 4.4            | 0.10          |
|      |         | 20                | F              | 10.0          | 0.1          | C    |     |          | 4.9            | 0.05          |
|      |         | 21                | F              | 31.0          | 0.2          | C    |     |          | 15.0           | 0.10          |
| 2    | H5      | 22                | C              | 25.0          | 4            | C    |     |          | 12.1           | 1.94          |
|      |         | 23                | F              | 8.0           | 0.2          | C    |     |          | 3.9            | 0.10          |
|      |         | 24                | B              | 26.0          | 0.4          | C    |     |          | 12.6           | 0.19          |
|      | I3      | 25                | B              | 12.0          | 0.6          | C    |     |          | 5.8            | 0.29          |
|      | G2      | 26                | C              | 12.0          | 2.5          | C    |     |          | 5.8            | 1.21          |
|      |         | 27                | F              | 5.0           | 0.2          | C    |     |          | 2.4            | 0.10          |
|      | E4      | 28                | F              | 15.0          | 0.2          | C    |     |          | 7.3            | 0.10          |
|      |         | 29                | B              | 6.0           | 0.3          | C    |     |          | 2.9            | 0.15          |
|      | C5      | 30                | F              | 15.0          | 0.2          | C    |     |          | 7.3            | 0.10          |
|      |         | 31                | F              | 12.0          | 0.2          | C    |     |          | 5.8            | 0.10          |
|      |         | 32                | F              | 38.0          | 0.2          | C    |     |          | 18.4           | 0.10          |
|      |         | 33                | C              | 12.0          | 1            | C    |     |          | 5.8            | 0.49          |
|      |         |                   |                |               |              |      |     |          |                |               |
|      |         |                   |                |               |              |      |     |          |                |               |

\*NFD or NSD = No Fibers Detected or No Structures Detected

\*\* On Screen Measurement

\*\*\* Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

## Surface Dust Sample Analysis Sheet

|                |             |                                  |        |
|----------------|-------------|----------------------------------|--------|
| MVA Project#   | 5394        | Amt Collected(cm <sup>2</sup> ): | 100    |
| MVA Sample#    | S0935       | Amt Prepped(cm <sup>2</sup> ):   | 0.1    |
| Client I.D.:   | 33VA        | Filter Area (mm <sup>2</sup> ):  | 1256   |
| Instrument:    | Philips 420 | Filter Type:                     | PC 0.2 |
| Magnification: | 20,600      | Openings Analyzed:               | 10     |
| Acc. Voltage:  | 100         | Grid Opening (mm <sup>2</sup> ): | 0.009  |

Analyst: AH  
Date: 8/23/2007  
Page: 1 of 1  
Comments:  
ASTM Method: D6480  
or D5755 X

[illegible]

<sup>a</sup>NFD or NSD = No Fibers Detected or No Structures Detected

**\*\* On Screen Measurement**

\*\*\* Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

Analyst: AH  
Date: 8/28/2007-8/29/2007  
Page: 1 of 1  
Comments: 0.1 ML ANAL.  
ASTM Method: D6480  
or D5755 X

[illegible]

\*NFD or NSD = No Fibers Detected or No Structures Detected

**\*\* On Screen Measurement**

\*\*\* Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

Analyst: WH  
Date: 8/29/2007  
Page: 1 of 1  
Comments: 0.01ml  
ASTM Method: D6480  
or D5755 X

5394report083007atascadero





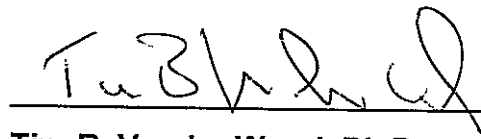
**Report of Results: MVA5394**

**Analysis of Settled Dust  
Conservation Center**

**Prepared for:**

**State of California  
Dept of General Services  
Seismic & Special Programs  
707 West 3rd St.  
West Sacramento, CA 95605**

**Respectfully Submitted by:**



**Tim B. Vander Wood, Ph.D.  
Executive Director**

**MVA Scientific Consultants  
3300 Breckinridge Boulevard  
Suite 400  
Duluth, GA 30096**

**29 August 2007**



**Report of Results: MVA5394****Analysis of Settled Dust - Conservation Center****Introduction**

On 1 August 2007, we received four settled dust samples from Clark Sief Clark, reportedly collected from the Conservation Center, 511 Byrnes Ferry Rd, Jamestown, California. We were asked to determine the asbestos levels in the dust and possible sources for the asbestos. Upon receipt, the samples were assigned MVA Scientific Consultants laboratory identification numbers as follows:

| <u>Sample ID</u> | <u>Sample Description</u>                            | <u>MVA Number</u> |
|------------------|--|-------------------|
| 42VA             | Hallway-bet Rm 129 & 184,<br>Ceiling hatch-surface   | S0944             |
| 43VA             | Hallway-across from Rm 182,<br>Ceiling hatch-surface | S0945             |
| 44VA             | Hallway-across from Rm 147,<br>Ceiling hatch-surface | S0946             |
| 45VA             | Visitor's hall, ceiling hatch surface                | S0947             |

All analyses were carried out in our laboratory during the period 1 August through 29 August 2007.

**Methods**

The samples were analyzed according to ASTM Method D5755-03 using either a Philips model EM420 or a Philips model CM120 transmission electron microscope (TEM), equipped with an Oxford INCA energy dispersive x-ray spectrometer (EDS). Additional analyses for dust constituents that might serve as source indicators were also conducted by TEM/EDS.

**Results and Discussion**

The results of analysis for these samples are presented in Table 1. The Appendix contains a summary of the analytical results, the laboratory count sheets, and images and EDS spectra of typical asbestos fibers found in these samples. Also contained in the appendix are images and spectra showing matrix associated with chrysotile fibers.



## Conclusions

Dust analyzed in this study contains elevated levels of chrysotile asbestos. Portions of the dust are consistent with derivation from a chrysotile/vermiculite bearing fireproofing.

**Table 1. Asbestos Concentration in Settled Dust Samples**

| Sample ID | MVA Number | Asbestos Str/cm <sup>2</sup> |
|-----------|------------|------------------------------|
| 42VA      | S0944      | 237,244                      |
| 43VA      | S0945      | 139,556                      |
| 44VA      | S0946      | 446,578                      |
| 45VA      | S0947      | 237,244                      |





**ASTM D5755 Results****MVA 5394**

By: W.Hill

Client project number:

Str/cm = No Str. X CFA X Total Vol.

Grid Op. X GO Area X Vol Filt X Area Sampled

| MVA #: | S0944 | Client #: | 42.VA   |             |            |            |
|--------|-------|-----------|---------|-------------|------------|------------|
| Str. # | CFA   | #GO       | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 17     | 1256  | 10        | 0.009   | 1           | 100        | 100        |

Anal. Sens = 13955.556 Str/CM2 LOD =3\* Anal. Sens = 41866.667  
 Total = 237244.444 Str/CM2

| MVA #: | S0945 | Client #: | 43.VA   |             |            |            |
|--------|-------|-----------|---------|-------------|------------|------------|
| Str. # | CFA   | #GO       | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 10     | 1256  | 10        | 0.009   | 1           | 100        | 100        |

Anal. Sens = 13955.556 Str/CM2 LOD =3\* Anal. Sens = 41866.667  
 Total = 139555.556 Str/CM2

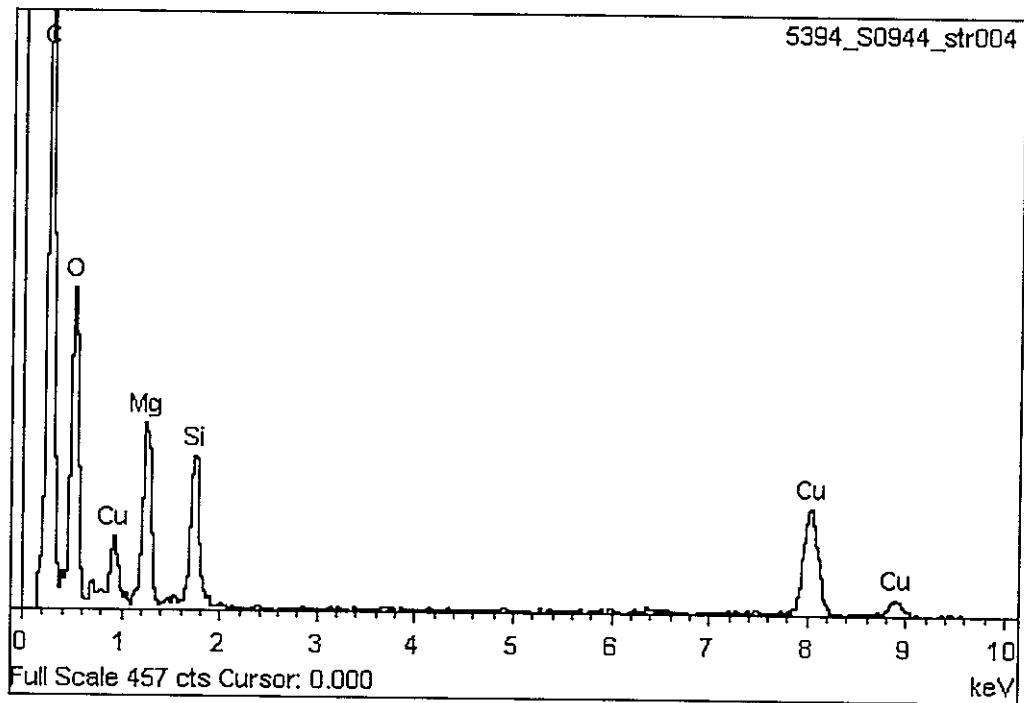
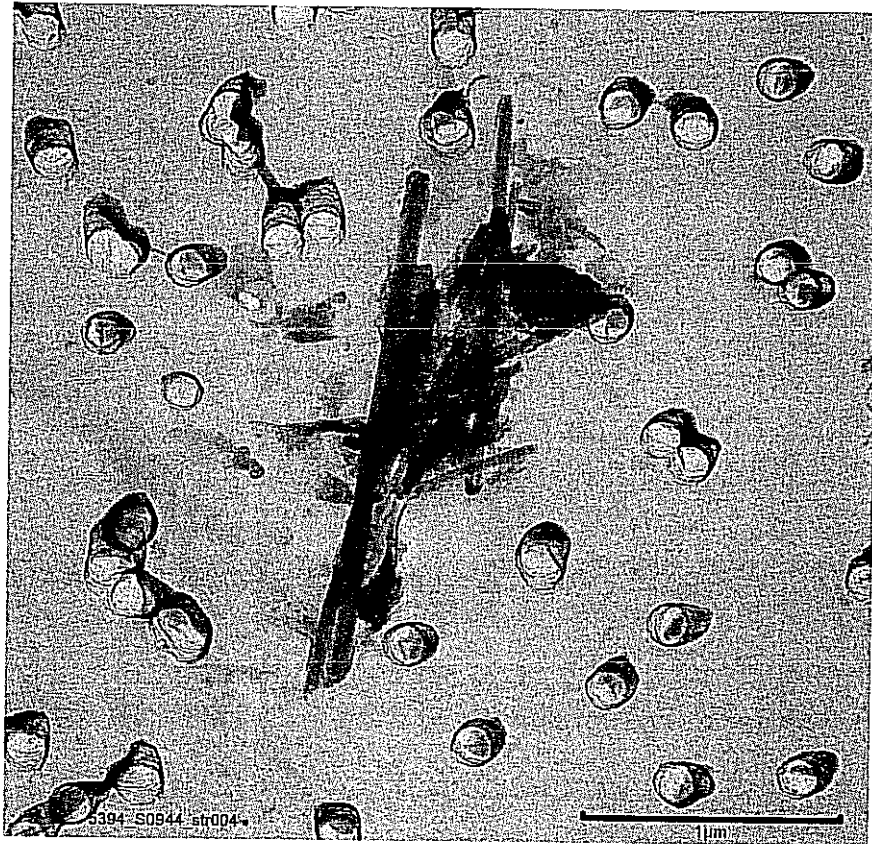
| MVA #: | S0946 | Client #: | 44.VA   |             |            |            |
|--------|-------|-----------|---------|-------------|------------|------------|
| Str. # | CFA   | #GO       | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 32     | 1256  | 10        | 0.009   | 1           | 100        | 100        |

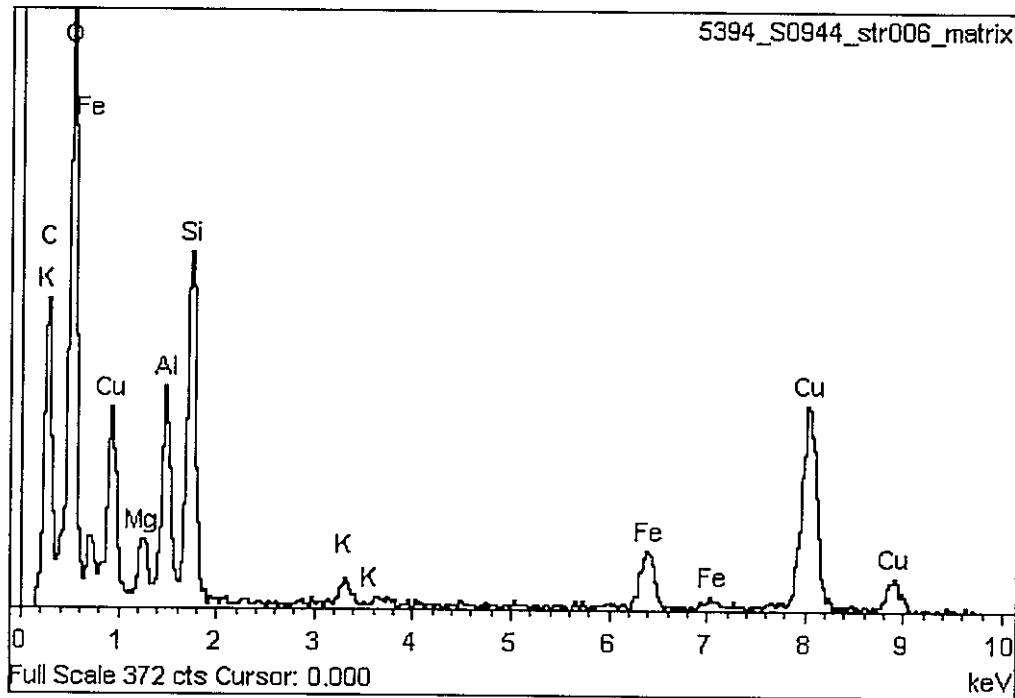
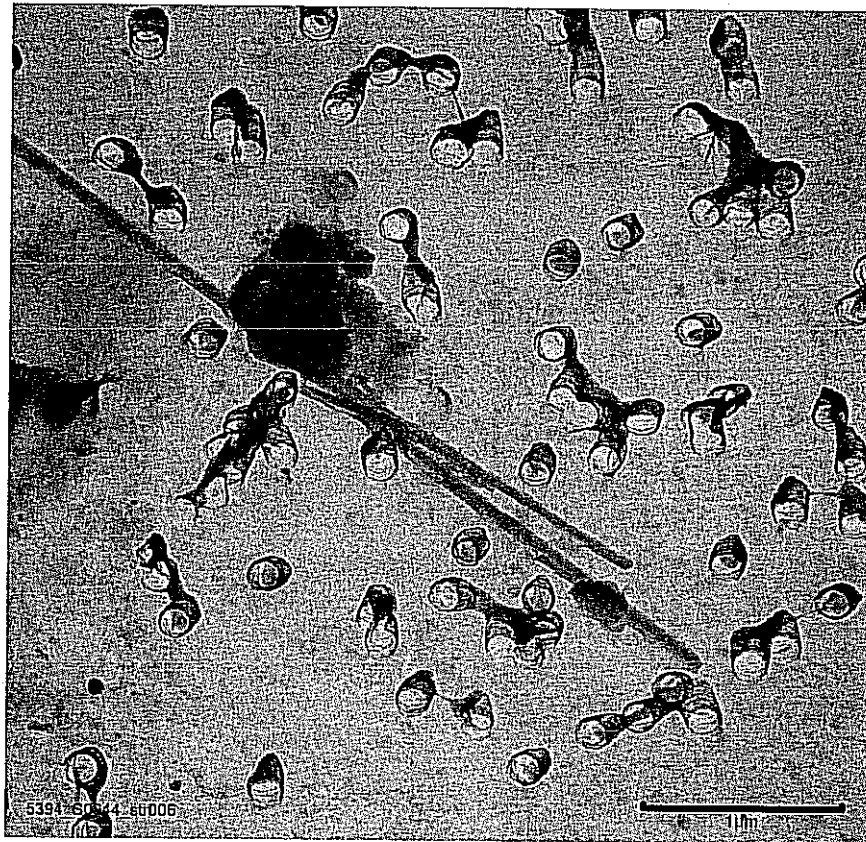
Anal. Sens = 13955.556 Str/CM2 LOD =3\* Anal. Sens = 41866.667  
 Total = 446577.778 Str/CM2

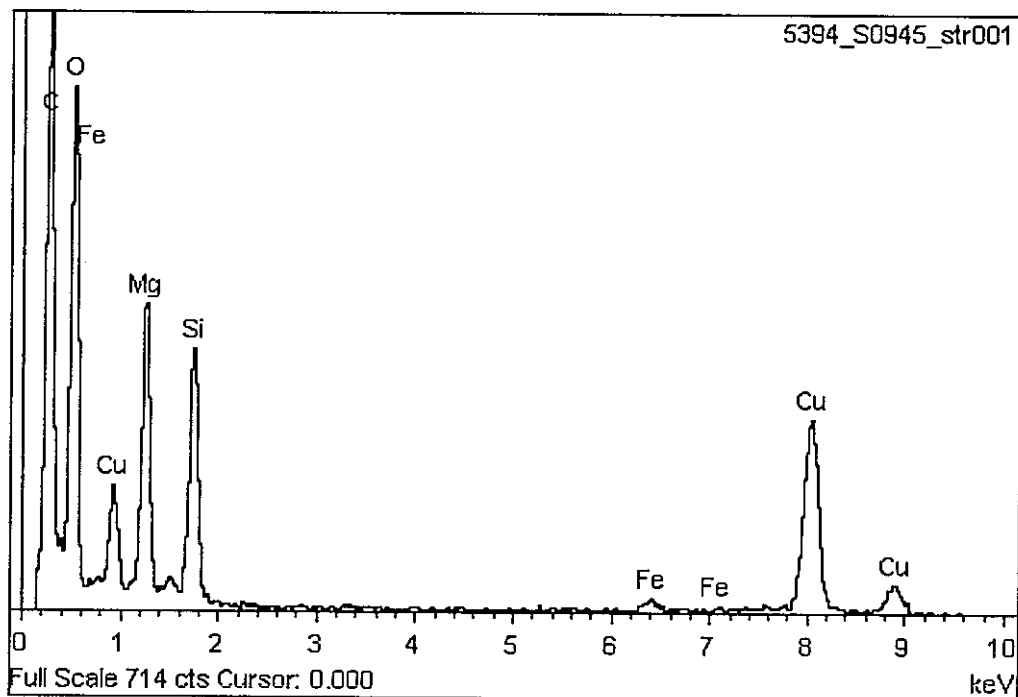
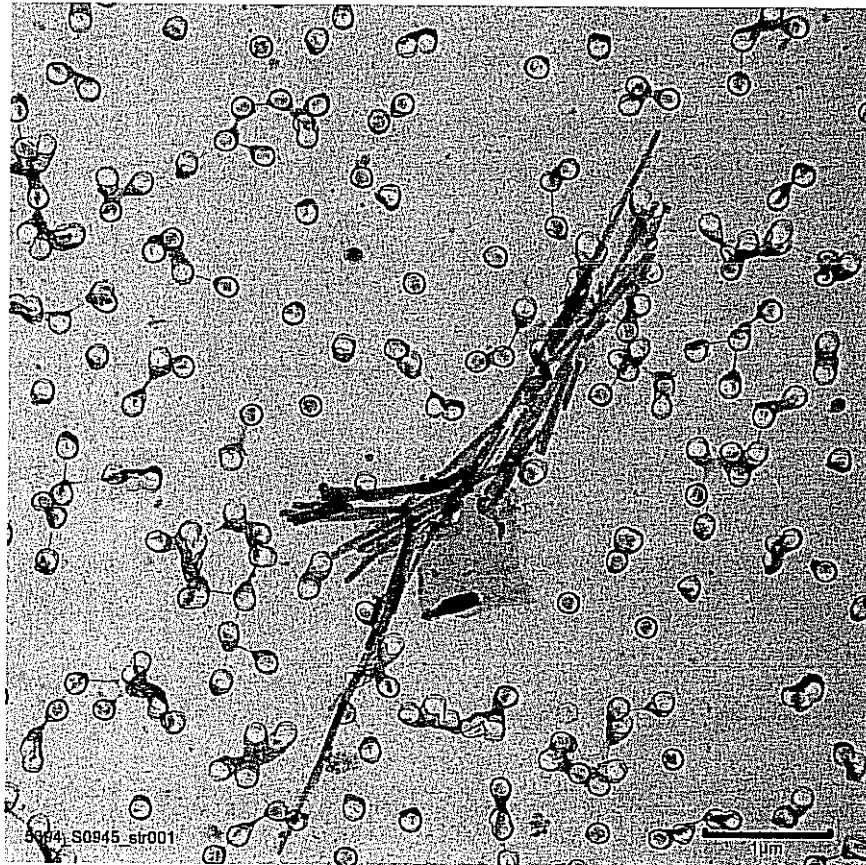
| MVA #: | S0947 | Client #: | 45.VA   |             |            |            |
|--------|-------|-----------|---------|-------------|------------|------------|
| Str. # | CFA   | #GO       | Area GO | Vol Filt ml | Total Vol. | Area Samp. |
| 17     | 1256  | 10        | 0.009   | 1           | 100        | 100        |

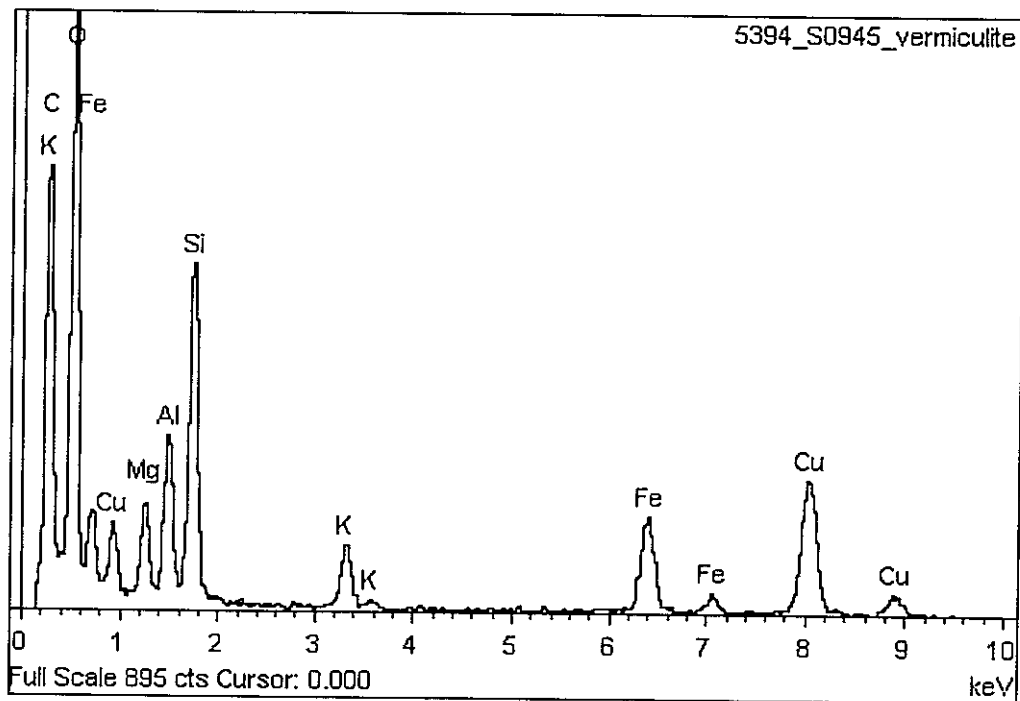
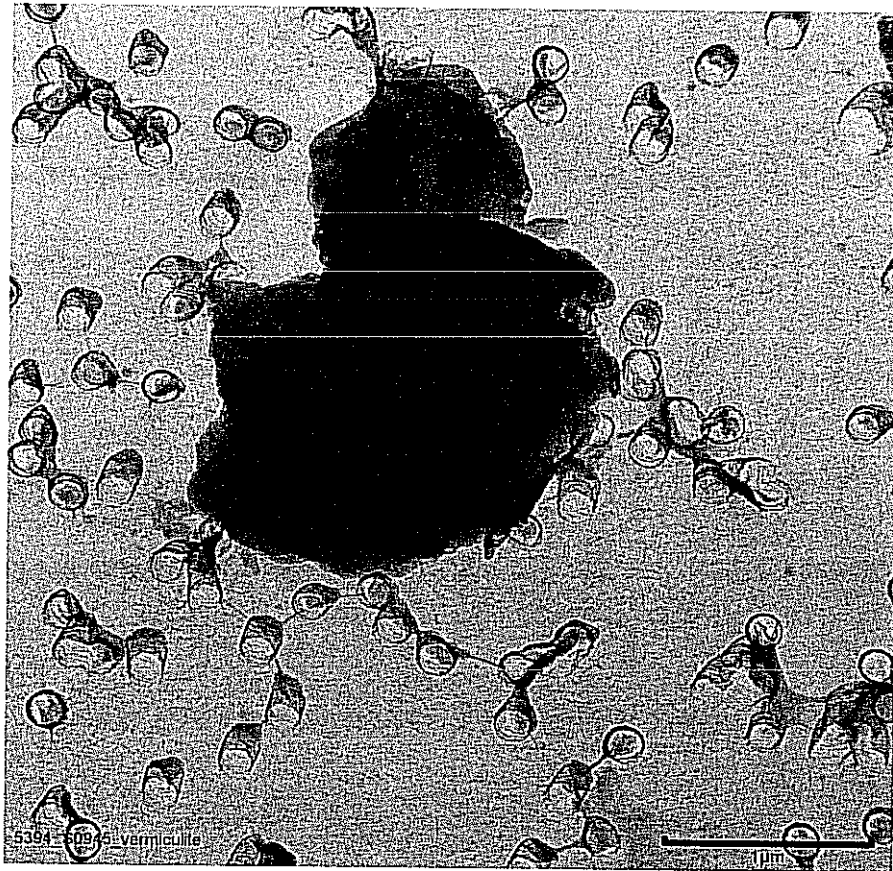
Anal. Sens = 13955.556 Str/CM2 LOD =3\* Anal. Sens = 41866.667  
 Total = 237244.444 Str/CM2

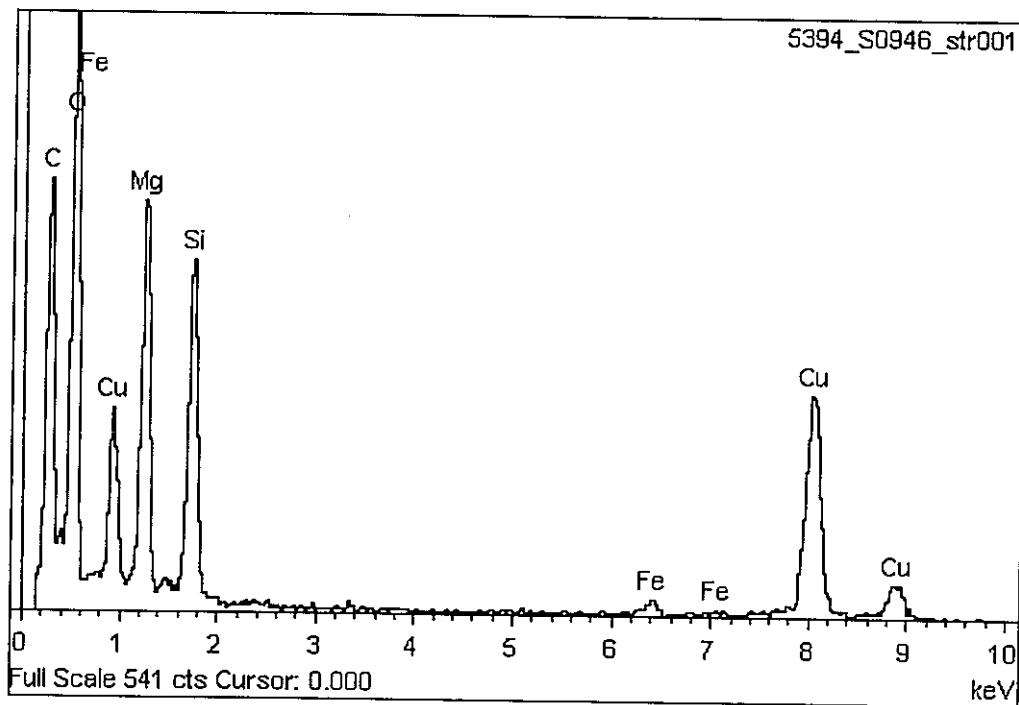
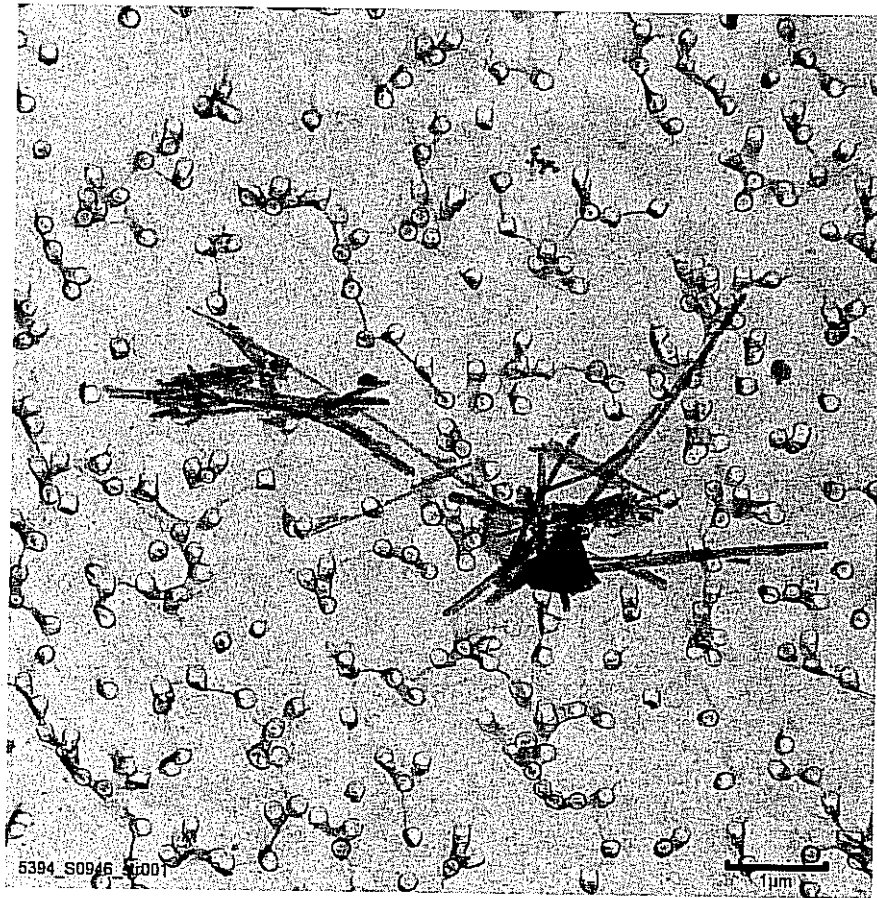
\*According to ASTM D6620

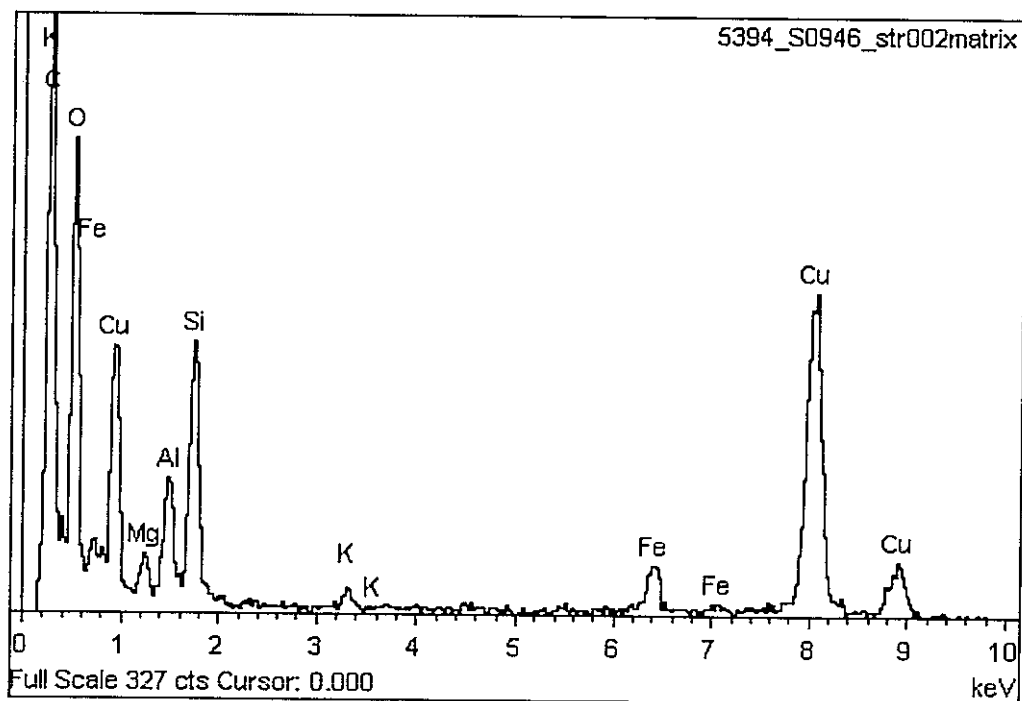
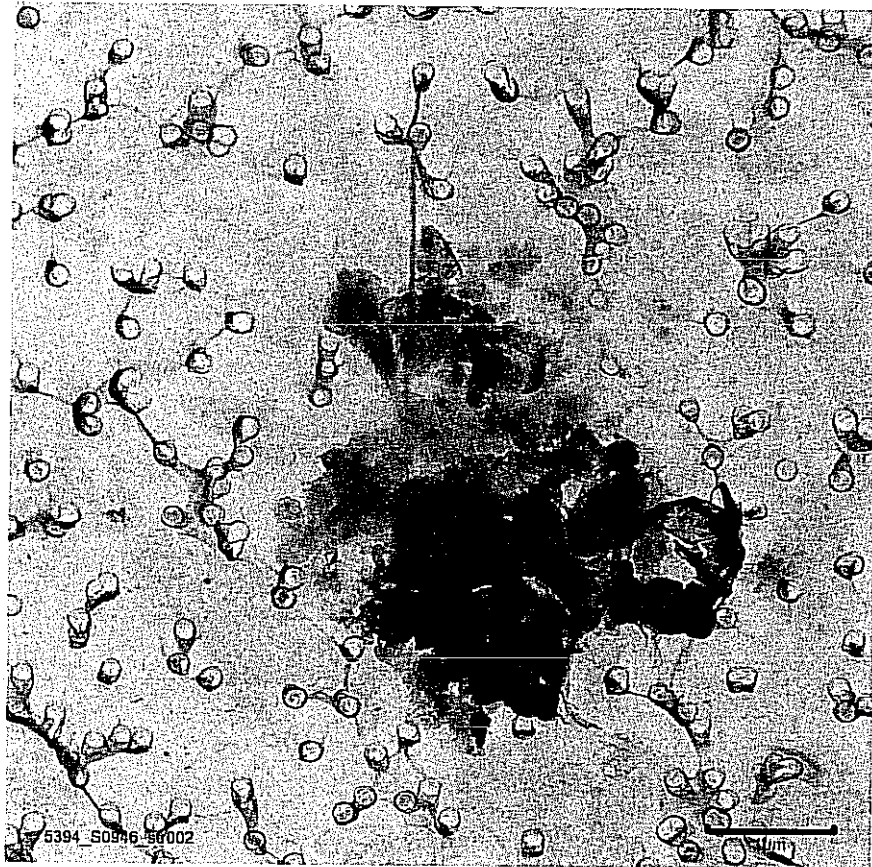


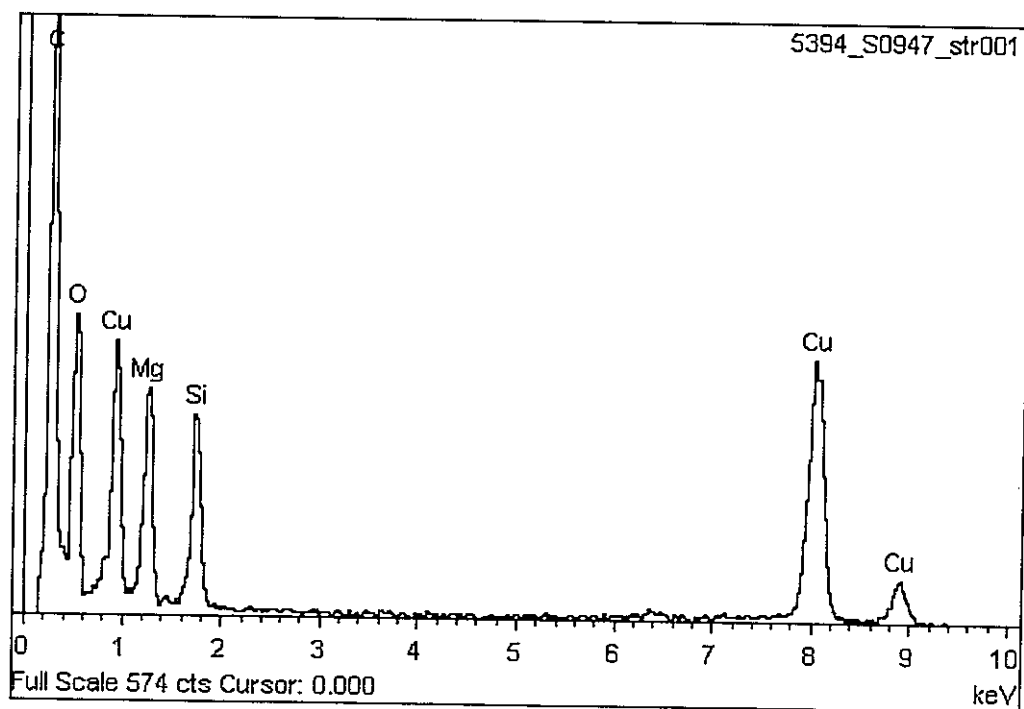
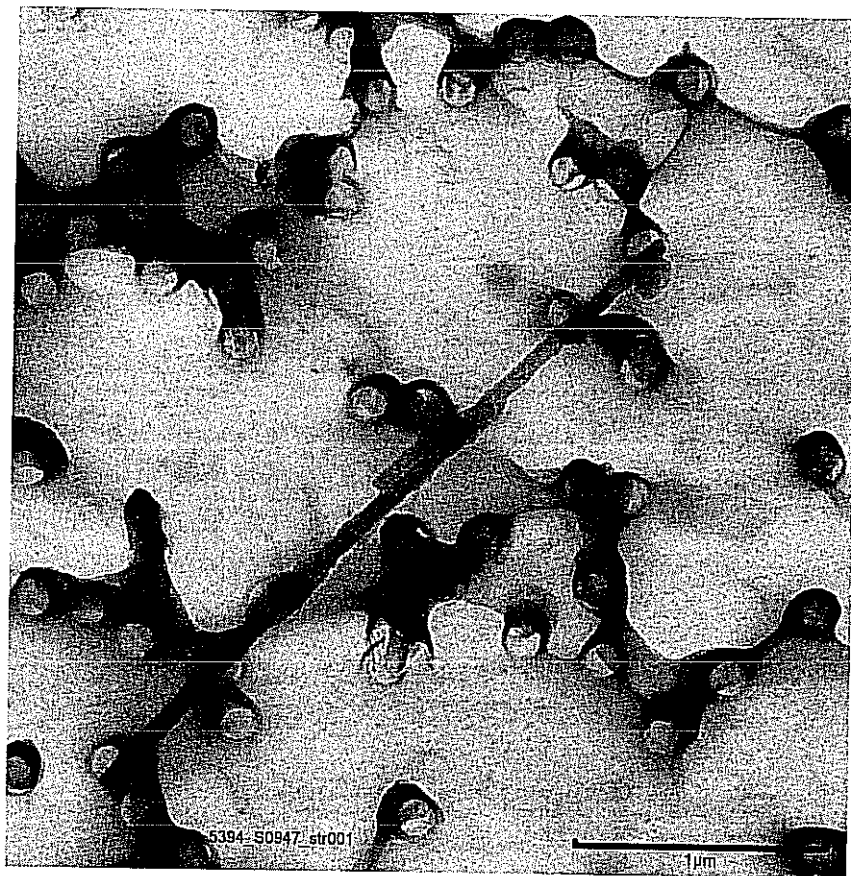


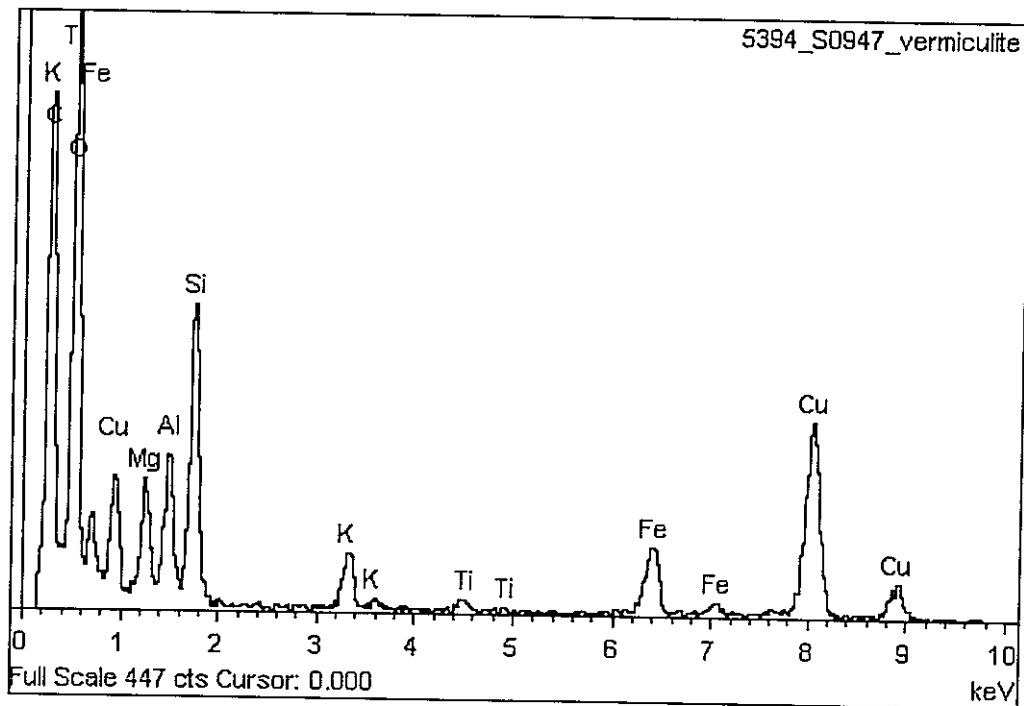
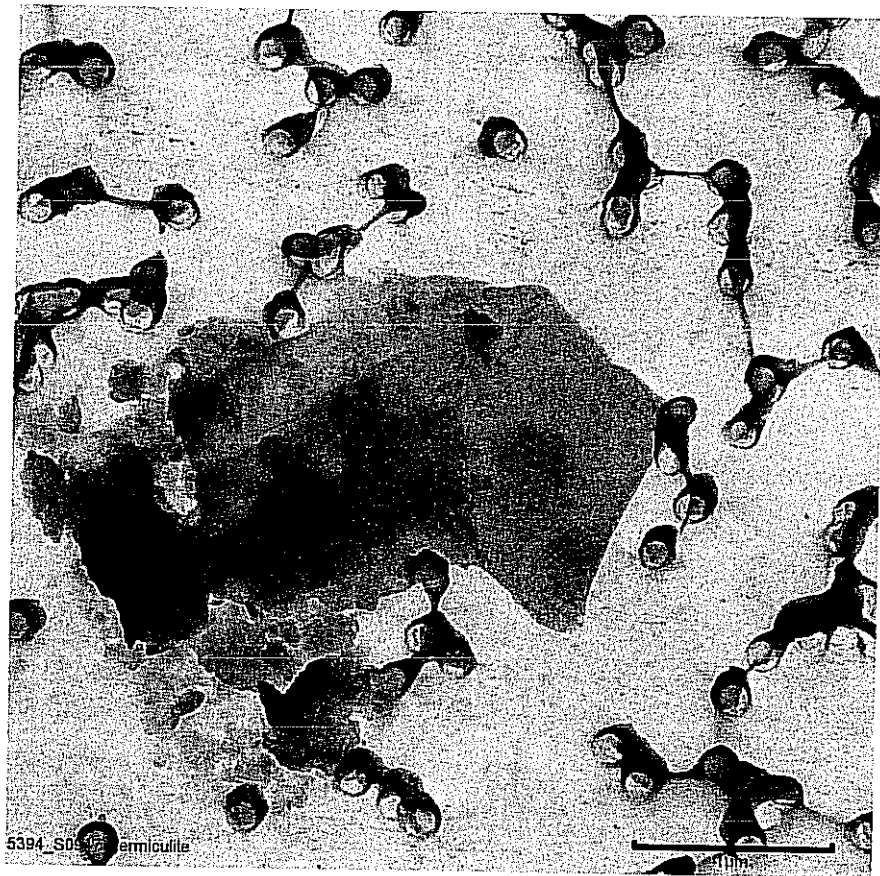












|                |             |                                  |       |
|----------------|-------------|----------------------------------|-------|
| MVA Project#   | 5394        | Amt Collected(cm <sup>2</sup> ): | 100   |
| MVA Sample#    | S0944       | Amt Prepped(cm <sup>2</sup> ):   | 1     |
| Client I.D.:   | 42VA        | Filter Area (mm <sup>2</sup> ):  | 1256  |
| Instrument:    | Philips 120 | Filter Type:                     | PC    |
| Magnification: | 24,000      | Openings Analyzed:               | 10    |
| Acc. Voltage:  | 100         | Grid Opening (mm <sup>2</sup> ): | 0.009 |

or D5755      X

5394report082907conservation

Amt Collected( $\text{cm}^2$ ): 100

or D5755 X

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

## Surface Dust Sample Analysis Sheet

MVA Project# 5394 Amt Collected(cm<sup>2</sup>): 100  
MVA Sample# S0946 Amt Prepped(cm<sup>2</sup>): 1  
Client I.D.: 44VA Filter Area (mm<sup>2</sup>): 1256  
Instrument: Philips 120 Filter Type: PC  
Magnification: 24,000 Openings Analyzed: 10  
Acc. Voltage: 100 Grid Opening (mm<sup>2</sup>): 0.009

Analyst: WH  
Date: 8/29/2007  
Page: 1 of 1  
Comments: 1ml  
ASTM Method: D6480  
or D5755 X

| Grid | Opening | Structure Number* | Structure Type | Length** (cm) | Width** (cm) | SAED | EDS | Comments | Length*** (μm) | Width*** (μm) |
|------|---------|-------------------|----------------|---------------|--------------|------|-----|----------|----------------|---------------|
| 1    | I4      | NSD               |                |               |              |      |     |          |                |               |
|      | H2      | 1                 | C              | 17.5          | 10           | C    | C   | photo    | 7.3            | 4.17          |
|      |         | 2                 | M              | 2.5           | 0.1          | C    |     | photo    | 1.0            | 0.04          |
|      |         | 3                 | B              | 37.0          | 1.5          | C    |     |          | 15.4           | 0.63          |
|      |         | 4                 | B              | 8.0           | 0.2          | C    |     |          | 3.3            | 0.08          |
|      | F1      | 5                 | C              | 12.5          | 5            | C    |     |          | 5.2            | 2.08          |
|      |         | 6                 | F              | 20.0          | 0.1          | C    |     |          | 8.3            | 0.04          |
|      |         | 7                 | F              | 9.5           | 0.1          | C    |     |          | 4.0            | 0.04          |
|      | D6      | 8                 | C              | 21.0          | 2.5          | C    |     |          | 8.8            | 1.04          |
|      |         | 9                 | F              | 7.0           | 0.1          | C    |     |          | 2.9            | 0.04          |
|      |         | 10                | F              | 3.5           | 0.15         | C    |     |          | 1.5            | 0.06          |
|      | B1      | 11                | F              | 28.5          | 0.1          | C    |     |          | 11.9           | 0.04          |
|      |         | 12                | B              | 6.0           | 0.9          | C    |     |          | 2.5            | 0.38          |
|      |         | 13                | B              | 17.5          | 2.5          | C    |     |          | 7.3            | 1.04          |
| 2    | B2      | 14                | M              | 21.0          | 0.1          | C    |     |          | 8.8            | 0.04          |
|      |         | 15                | F              | 11.5          | 0.2          | C    |     |          | 4.8            | 0.08          |
|      |         | 16                | B              | 11.0          | 1.6          | C    |     |          | 4.6            | 0.67          |
|      |         | 17                | F              | 1.5           | 0.1          | C    |     |          | 0.6            | 0.04          |
|      | A4      | 18                | C              | 11.0          | 7            | C    |     |          | 4.6            | 2.92          |
|      |         | 19                | F              | 1.9           | 0.2          | C    |     |          | 0.8            | 0.08          |
|      |         | 20                | B              | 25.0          | 0.4          | C    |     |          | 10.4           | 0.17          |
|      |         | 21                | F              | 2.1           | 0.1          | C    |     |          | 0.9            | 0.04          |
|      |         | 22                | B              | 13.0          | 0.4          | C    |     |          | 5.4            | 0.17          |
|      | E3      | 23                | B              | 9.0           | 0.5          | C    |     |          | 3.8            | 0.21          |
|      |         | 24                | F              | 5.0           | 0.15         | C    |     |          | 2.1            | 0.06          |
|      |         | 25                | B              | 41.5          | 1.5          | C    |     |          | 17.3           | 0.63          |
|      |         | 26                | F              | 2.6           | 0.1          | C    |     |          | 1.1            | 0.04          |
|      | F7      | 27                | M              | 3.0           | 0.1          | C    |     |          | 1.3            | 0.04          |
|      |         | 28                | F              | 25.5          | 0.1          | C    |     |          | 10.6           | 0.04          |
|      |         | 29                | F              | 25.0          | 0.1          | C    |     |          | 10.4           | 0.04          |
|      |         | 30                | M              | 10.5          | 0.1          | C    |     |          | 4.4            | 0.04          |
|      |         | 31                | F              | 3.7           | 0.1          | C    |     |          | 1.5            | 0.04          |
|      |         | 32                | B              | 6.5           | 0.25         | C    |     |          | 2.7            | 0.10          |
|      | I5      | NSD               |                |               |              |      |     |          |                |               |

\*NFD or NSD = No Fibers Detected or No Structures Detected

\*\* On Screen Measurement

\*\*\* Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos

## Surface Dust Sample Analysis Sheet

|                |             |                                  |       |
|----------------|-------------|----------------------------------|-------|
| MVA Project#   | 5394        | Amt Collected(cm <sup>2</sup> ): | 100   |
| MVA Sample#    | S0947       | Amt Prepped(cm <sup>2</sup> ):   | 1     |
| Client I.D.:   | 45VA        | Filter Area (mm <sup>2</sup> ):  | 1256  |
| Instrument:    | Philips 120 | Filter Type:                     | PC    |
| Magnification: | 24,000      | Openings Analyzed:               | 10    |
| Acc. Voltage:  | 100         | Grid Opening (mm <sup>2</sup> ): | 0.009 |

Analyst: WH  
Date: 8/29/2007  
Page: 1 of 1  
Comments: 1ml  
ASTM Method: D6480  
or D5755 X

[illegible]

\*NFD or NSD = No Fibers Detected or No Structures Detected

**\*\* On Screen Measurement**

\*\*\* Calculated Actual Measurement (On Screen Measurement X 10,000/Magnification)

Structure Type: B = Bundle, C = Cluster, F = Fiber, M = Matrix

SAED: C = Chrysotile, A = Amphibole

EDS: C = Chrysotile, AM = Amosite, CR = Crocidolite, AC = Actinolite, AN = Anthophyllite, TR = Tremolite, N = Non Asbestos